

Run on:	October 18, 2005, 13:28:04 ; Search time 166 Seconds (without alignments)	62.907 Million cell updates/sec
Title:	US-09-662-784-6_COPY_33_59	
Perfect score:	27	
Sequence:	1 FFAVANGNELLIDLSITKVNATEPERT 27	
Scoring table:	OLIGO Gapop 60.0 , Gapext 60.0	
Searched:	2105692 seqs, 386760301 residues	
Word size :	0	
Total number of hits satisfying chosen parameters:	2105692	
Minimum DB seq length:	0	
Maximum DB seq length:	200000000	
Post-processing:	Listing first 45 summaries	
Database :	A_Geneseq16Dec04;*	
	1: geneseqp1980s;*	
	2: geneseqp1990s;*	
	3: geneseqp2000s;*	
	4: geneseqp2001s;*	
	5: geneseqp2002s;*	
	6: geneseqp2003as;*	
	7: geneseqp2003bs;*	
	8: geneseqp2004s;*	
Pred. No.	is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.	
RESULT 1		
ID	AAY51476 standard; protein; 90 AA.	
XX		
AC	AAY51476;	
XX		
DT	22-MAY-2000 (first entry)	
XX		
DE	Human TRFP chain 2 (short form) protein fragment #2.	
XX		
KW	T-cell reactive feline protein; TRFP; T cell epitope; T cell receptor; down regulation; immune response; allergen; immunoglobulin E; sensitivity; cat protein allergen; human; chain 2.	
KW		
OS	Homo sapiens.	
XX		
PN	US6019972-A.	
XX		
PD	01-FEB-2000.	
XX		
PP	02-SEP-1984; 94US-0030928.	
XX		
PR	03-NOV-1989; 89US-00431565.	
PR	28-FEB-1991; 91US-00662276.	
PR	13-DEC-1991; 91US-00801529.	
PR	25-MAR-1992; 92US-00857311.	
PR	15-MAY-1992; 92US-00884718.	
PR	15-JAN-1993; 93US-00006116.	
XX		
(IMMU-) IMMUNOLOGIC PHARM CORP.		
XX		
PI	Garmen RD, Greenstein JL, Kuo M, Briner TJ, Morville M;	
PI	Geffter ML;	
XX		
DR	WPI; 2000-146862/13.	
XX		
PT	Peptides of human T cell reactive feline protein for treating sensitivity to cat protein allergens comprise at least one T cell epitope recognized by a T cell receptor specific for the human T cell reactive feline protein.	
PT		
PS	Example 1; Col 83-84; 105pp; English.	
XX		
CC	This invention describes a novel Peptide (1) of human T cell reactive feline protein (hTRFP) having at least one T cell epitope recognized by a T cell receptor specific for the human T cell reactive feline protein, the peptide consisting of at least 7-30 amino acids, and having an amino acid sequence derived from an amino acid sequence comprising 94, 96, 97,	

109, or 111 residues, given in the specification. The peptides down regulate the immune response to the allergen. The peptides have reduced immunoglobulin E binding and reduce T cell responsiveness. The peptide (I) is useful in compositions for treating sensitivity to a cat protein allergen in a subject. This sequence represents the human TRFP chain 2 (short form)

XX SQ Sequence 90 AA;

Query Match 100.0%; Score 27; DB 3; Length 90;  
Best Local Similarity 100.0%; Pred. No. 2.9e-19;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 FFAVANGNELLDISLTKVNATEPERT 27  
Db 14 FFAVANGNELLDISLTKVNATEPERT 40

RESULT 2  
AAB28938  
ID AAB28938 standard; protein; 90 AA.  
XX AC AAB28938;  
XX DT 29-JAN-2001 (first entry)  
DB T cell reactive feline protein chain 2 PRO short.  
XX Cat; allergy; human T cell reactive feline protein; hTRFP; immunotherapy.  
XX OS Felis sp.  
XX PN US6120769-A.  
XX PD 19-SEP-2000.  
XX PP 28-APR-1995; 95US-00431184.  
XX PR 03-NOV-1989; 89US-00431565.  
XX PR 28-FEB-1991; 91US-00807529.  
XX PR 25-MAR-1992; 92US-00857311.  
PR 15-MAY-1992; 92US-00884718.  
PR 15-JAN-1993; 93US-00006116.  
PR 02-SEP-1994; 94US-00300928.  
XX PA (IMMU-) IMMULOGIC PHARM CORP.  
XX PI Kuo M, Rogers BL, Geffer ML, Morgenstern JP, Brauer AW;  
DI Greenstein JL, Griffith JF, Garman RD;  
DR WPI; 2000-316905/27.

XX Example 2; Col 83-84; 106pp; English.

XX This invention describes a novel naturally occurring cat protein allergen (I), human T cell reactive feline protein (TRFP), comprising two different covalently linked peptide chains with a molecular weight of 20 kD, 40 kD or 130 kD under non-reducing conditions and 5 kD or 10-18 kD under reducing conditions. The products of the invention have anti-allergic activity and act as human T cell stimulators. TRFP is also useful for reducing or preventing the adverse effects of cat allergens on cat allergic individuals and in ex vivo diagnostic tests to determine which cat sensitive individual. Purified TRFP is also useful for studying the mechanism of immunotherapy of cat allergy and to design modified derivatives, analogs or functional equivalents that are more useful in immunotherapy against cat allergy. DNA sequences encoding TRFP are useful as probes to locate equivalent sequences present in other species (goats, sheep, dogs, rabbits or horses) that may be useful in diagnostics and/or therapeutics. Fully defined and characterized TRFP provides complete and a very simple desensitization therapy. This sequence represents a human T cell reactive feline protein (also known as Fel d I) chain 2, short form which is described in the method of the invention

XX SQ Sequence 90 AA;

	Matches	27; Conservative 0;	Mismatches	0;	Indels	0;	Gaps	0;
QY	1 FFAVANGNELLDISLTKVNATEPERT	27						
Db	14 FFAVANGNELLDISLTKVNATEPERT	40						

RESULT 3  
AY87679  
ID AAY87679 standard; protein; 90 AA.

XX AAY87679;  
AC AAY87679;

XX DT 22-AUG-2000 (first entry)  
DR Feline human TRFP chain 2 short form protein #2.

XX KW T-cell reactive feline protein; TRFP; Fel d I; cat allergen; antiallergic; T cell stimulator; diagnostic; immunotherapy.  
XX OS Felis sp.  
XX PN US6048962-A.  
XX PD 11-APR-2000.  
XX PR 27-APR-1995; 95US-00430014.

XX PR 03-NOV-1989; 89US-00431565.

XX PR 28-FEB-1991; 91US-00622276.

XX PR 13-DEC-1991; 91US-00807529.

XX PR 25-MAR-1992; 92US-00857311.

XX PR 15-MAY-1992; 92US-00884718.

XX PR 15-JAN-1993; 93US-00006116.

XX PR 02-SEP-1994; 94US-00300928.

XX PA (IMMU-) IMMULOGIC PHARM CORP.

XX PI Kuo M, Rogers BL, Geffer ML, Morgenstern JP, Brauer AW;

DI Greenstein JL, Griffith JF, Garman RD;

DR WPI; 2000-316905/27.

XX New human T cell reactive feline protein useful for reducing or abolishing individual's allergic response to cat allergen comprising two different covalently linked peptide chains.  
XX PS Example 2; Col 83-84; 106pp; English.

XX This invention describes a novel naturally occurring cat protein allergen (I), human T cell reactive feline protein (TRFP), comprising two different covalently linked peptide chains with a molecular weight of 20 kD, 40 kD or 130 kD under non-reducing conditions and 5 kD or 10-18 kD under reducing conditions. The products of the invention have anti-allergic activity and act as human T cell stimulators. TRFP is useful for reducing or preventing the adverse effects of cat allergens on cat allergic individuals and in ex vivo diagnostic tests to determine which cat sensitive individual. Purified TRFP is also useful for studying the mechanism of immunotherapy of cat allergy and to design modified derivatives, analogs or functional equivalents that are more useful in immunotherapy against cat allergy. DNA sequences encoding TRFP are useful as probes to locate equivalent sequences present in other species (goats, sheep, dogs, rabbits or horses) that may be useful in diagnostics and/or therapeutics. Fully defined and characterized TRFP provides complete and a very simple desensitization therapy. This sequence represents a human T cell reactive feline protein (also known as Fel d I) chain 2, short form which is described in the method of the invention

XX SQ Sequence 90 AA;

Query Match 100.0%; Score 27; DB 3; Length 90;  
Best Local Similarity 100.0%; Pred. No. 2.9e-19;



KW antiallergic; T cell stimulator; diagnostic; immunotherapy.  
 XX OS Felis sp.  
 XX PN US6048962-A.  
 XX KK  
 PD 11-APR-2000.  
 XX FF 27-APR-1995; 95US-00430014.  
 XX PR 03-NOV-1989; 89US-00431565.  
 PR 28-FEB-1991; 91US-00662376.  
 PR 13-DEC-1991; 91US-00807529.  
 PR 25-MAR-1992; 92US-00857311.  
 PR 15-MAY-1992; 92US-00884718.  
 PR 15-JAN-1993; 93US-00006116.  
 PR 02-SEP-1994; 94US-00300928.  
 XX PA (IMMU-) IMMULOGIC PHARM CORP.  
 XX PT Kuo M, Rogers BL, Gefter ML, Morgenstern JP, Brauer AW;  
 PI Greenstein JL, Griffith IJ, Garman RD;  
 XX WPI; 2000-316905/27.  
 PT New human T cell reactive feline protein useful for reducing or  
 abolishing individual's allergic response to cat allergen comprising two  
 different covalently linked peptide chains.  
 XX PS Example 2, Col 81-84; 106pp; English.  
 XX CC This invention describes a novel naturally occurring cat protein allergen  
 (I), human T cell reactive feline protein (TRFP), comprising two of 20  
 different covalently linked peptide chains with a molecular weight of 20  
 kD, 40 kD or 130 kD under non-reducing conditions and 5 kD or 10-18 kD  
 under reducing conditions. The products of the invention have  
 anti-allergic activity and act as human T cell stimulators. TRFP is useful  
 for reducing or preventing the adverse effects of cat allergens on cat  
 allergic individuals and in ex vivo diagnostic tests to determine which  
 peptides cause sensitivity so as to selectively use them to desensitize a  
 cat sensitive individual. Purified TRFP is also useful for studying the  
 mechanism of immunotherapy of cat allergy and to design modified  
 derivatives, analogs or functional equivalents that are more useful in  
 immunotherapy against cat allergy. DNA sequences encoding TRFP are useful  
 as probes to locate equivalent sequence present in other species (goats,  
 sheep, dogs, rabbits or horses) that may be useful in diagnostics and/or  
 therapeutic. Fully defined and characterized TRFP provides complete and  
 a very simple desensitization therapy. This sequence represents a human T  
 cell reactive feline protein (also known as FcI d 1) chain 2, long form  
 which is described in the method of the invention  
 XX SQ Sequence 92 AA:  
 Query Match 100.0%; Score 27; DB 3; Length 92;  
 Best Local Similarity 100.0%; Pred. No. 3e-19; Mismatches 0;  
 Matches 27; Conservative 0; Indels 0; Gaps 0;  
 Oy 1 FFAVANGNELLIDLSDLSITKVNATEPERT 27  
 Db 14 FFAVANGNELLIDLSDLSITKVNATEPERT 40  
 RESULT 7  
 AAR12123 ID AAR12123 standard; protein: 97 AA.  
 AC AAR12123;  
 AC AAR12123;  
 DT 26-JUL-1991 (first entry)  
 DB TRFP chain 2 - truncated short form.  
 XX KW Human T cell reactive feline protein; cat allergens.  
 OS Homo sapiens.  
 PN US6019972-A.  
 XX PD 01-FEB-2000.  
 XX PA (IMMU-) IMMULOGIC PHARM CORP.  
 XX PT Gefter ML, Garman RD, Greenstein JL, JUO M, Rogers BL, Brauer AW;  
 PI WPI; 1991-164136/22.  
 DR N-PSDB; AAQ11840.  
 XX PR New pure covalently linked human T cell reactive feline protein - and  
 modified peptide(s), used to reduce effects of cat allergens and to  
 diagnose sensitivity to allergens.  
 XX PS Claim 2; Fig 5; 70pp; English.  
 XX CC Poly-A mRNA from cat parotid and mandibular glands was used to produce  
 CC cDNA clones for both chain 1 and chain 2 of TRFP. These clones were then  
 CC used to screen a cat genomic library. Chain 1 exists in two forms having  
 CC different leader sequences (A and B). The sequence can be used to express  
 CC the protein and peptide derive, which stimulate T-cells in persons  
 CC allergic to cats. The peptides can be used to reduce/eliminate the  
 CC allergic response partic. by modifin. or lymphokine prodn. by the T-  
 CC cells. They can also be used to identify epitopes responsible for  
 CC sensitivity. The DNA can be used to detect comparable sequence in other  
 CC species, and also for prodn. of modified forms of TRFP esp. showing  
 CC reduced binding to IgE and thus reduced tendency to cause adverse  
 CC reactions. See also AAR1219-R12122  
 XX SQ Sequence 97 AA;  
 Query Match 100.0%; Score 27; DB 2; Length 97;  
 Best Local Similarity 100.0%; Pred. No. 3.1e-19; Mismatches 0;  
 Matches 27; Conservative 0; Indels 0; Gaps 0;  
 Oy 1 FFAVANGNELLIDLSDLSITKVNATEPERT 27  
 Db 33 FFAVANGNELLIDLSDLSITKVNATEPERT 59  
 RESULT 8  
 AAY51472 ID AAY51472 standard; protein; 97 AA.  
 AC AAY51472;  
 AC AAY51472;  
 DT 22-MAY-2000 (first entry)  
 DE Human TRFP chain 2 (truncated form) protein fragment.  
 XX KW T-cell reactive feline protein; TRFP; T cell epitope; T cell receptor;  
 KW down regulation; immune response; allergen; immunoglobulin E;  
 KW sensitivity; cat protein allergen; human; chain 2.  
 OS Homo sapiens.  
 PN US6019972-A.  
 XX PD 01-FEB-2000.

PR 15-JAN-1993; 93US-00005116.  
 PR 02-SEP-1994; 94US-00300928.  
 XX  
 PR 03-NOV-1989; 89US-00431565.  
 XX  
 PA (IMMU-) IMMULOGIC PHARM CORP.  
 XX  
 PR 13-DEC-1991; 91US-00662276.  
 PR 22-MAR-1992; 92US-00857311.  
 PR 15-MAY-1992; 92US-00884718.  
 PR 15-JAN-1993; 93US-00006116.  
 XX  
 PA (IMMU-) IMMULOGIC PHARM CORP.  
 XX  
 PT Garman RD, Greenstein JL, Kuo M, Briner TJ, Morville M;  
 PT Gefter ML;  
 XX  
 DR WPI; 2000-145862/13.  
 XX  
 N-PSDB; AAC60105.  
 XX  
 PT Detecting, preventing and treating sensitivity to cat protein allergen  
 PT comprises combining a biological sample with a human T cell reactive  
 PT feline protein and determining the extent of binding that occurs.  
 XX  
 PS Claim 1; Fig 5; 106pp; English.  
 XX  
 CC The present invention relates to the detection of sensitivity to a cat  
 CC protein allergen by combining a blood sample from a subject with a  
 CC peptide of human T cell reactive feline protein (TRFP). This method and  
 CC peptide hTRFP peptides are useful for diagnosing, preventing and treating cat  
 CC allergies by reducing or abolishing an individual's allergic response to  
 CC a cat allergen. DNA encoding the TRFP may be used as probes to locate  
 CC equivalent sequences present in other species. These may further be used  
 CC to study the mechanism of immunotherapy of cat allergy, and to design  
 CC modified derivatives, analogues or functional equivalents useful in  
 CC immunotherapy. The present sequence was used in the invention  
 XX  
 SQ Sequence 97 AA;

Query Match 100.0%; Score 27; DB 3; Length 97;  
 Best Local Similarity 100.0%; Pred. No. 3.1e-19;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 FRAVANGNELLIDSLTAKNATEPERT 27  
 Db 33 FRAVANGNELLIDSLTAKNATEPERT 59

RESULT 9  
 AAB28935  
 ID AAB28935 standard; protein; 97 AA.  
 AC AAB28935;  
 XX  
 DT 29-JAN-2001 (first entry)  
 XX  
 Query Match 100.0%; Score 27; DB 3; Length 97;  
 Best Local Similarity 100.0%; Pred. No. 3.1e-19;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 FRAVANGNELLIDSLTAKNATEPERT 27  
 Db 33 FRAVANGNELLIDSLTAKNATEPERT 59

Sequence 97 AA;

RESULT 10  
 AAY90105  
 ID AAY90105 standard; protein; 97 AA.  
 AC AAY90105;  
 XX  
 DT 12-SEP-2003 (revised)  
 DT 13-JUL-2000 (first entry)  
 XX  
 Cat TRFP chain 2 truncated form protein sequence.  
 XX  
 KW Cat; TRFP; human T-cell reactive feline protein; cat protein allergen;  
 KW house dust; Fel d I; cat allergy; Felis domesticus sensitivity; therapy;  
 KW diagnosis; goat; sheep; horse; rabbit; dog.  
 OS Felis catus.  
 XX  
 PT Key Location/Qualifiers  
 PT Peptide 1..19  
 PT /note= "signal peptide"  
 PT Protein 20..97  
 PT /note= "mature TRFP chain 2 truncated form"  
 XX  
 PN US6025162-A.  
 XX  
 PD 15-FEB-2000.  
 XX  
 PF 28-APR-1995; 95US-00430944.  
 XX  
 PR 03-NOV-1989; 89US-00431565.  
 PR 28-FEB-1991; 91US-00662276.  
 PR 13-DEC-1991; 91US-00857311.  
 PR 25-MAR-1992; 92US-00884718.  
 PR 15-MAY-1992; 92US-00857311.  
 PR 15-JAN-1993; 93US-00006116.

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PR 02-SEP-1994; 94US-0030928.  
 XX DR  
 PA N-PSDB; AAA12246.  
 XX (IMMU-) IMMUNOLOGIC PHARM CORP.  
 PT Morgenstern JP, Griffith IJ, Rogers BL;  
 XX DR WPI; 2000-181812/16.  
 PT N-PSDB; AAA07439.  
 XX  
 PT New human T cell reactive feline protein, useful for desensitizing cat  
 XX allergic individuals to cat allergens.  
 PS Claim 1; FIG 5; 108pp; English.  
 XX  
 CC This sequence is a peptide chain of the human T cell reactive feline  
 CC protein (TRFP) of the invention. The protein is a cat protein allergen,  
 CC and was isolated from vacuum bag extract obtained by affinity  
 purification of house dust collected from several homes with cats. TRFP  
 CC is composed of two covalently linked peptide chains, and is also referred  
 CC to as Fel d I. TRFP and its peptides are useful for reducing or  
 CC preventing the adverse effects that exposure to cat allergens normally  
 CC has on cat allergic individuals (i.e. to desensitize individuals to cat  
 CC allergens or block the effect of the allergens). TRFP is also used in  
 CC methods of diagnosing sensitivity to *Felis domesticus* in an individual.  
 CC DNA sequences encoding TRFP can be used as probes to locate equivalent  
 CC sequences present in other species, e.g. goat, sheep, horse, rabbit and  
 CC dog, that may be useful in a diagnostic and/or therapeutic application.  
 CC (Updated on 12-SEP-2003 to standardise OS field)  
 XX SQ Sequence 97 AA:  
 Query Match 100.0%; Score 27; DB 3; Length 97;  
 Best Local Similarity 100.0%; Pred. No. 3.1e-19; Gaps 0;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Oy 1 FPAVANGNELLIDSLTKVNAEPERT 27  
 Db 33 FPAVANGNELLIDSLTKVNAEPERT 59  
 RESULT 11  
 AAY87675  
 ID AAY87675 standard; protein; 97 AA.  
 AC  
 XX AAY87675;  
 DT 22-AUG-2000 (first entry)  
 XX  
 DE Feline human TRFP chain 2 truncated form protein.  
 KW T-cell reactive feline protein; TRFP; Fel d I; cat allergen;  
 KW antiallergic; T cell stimulator; diagnostic; immunotherapy.  
 OS *Felis sp.*  
 XX  
 DE Cat allergen Fel dI MHC class II-presented epitope #5.  
 KW Antibacterial; Virucide; Fungicide; Antiparasitic; Antiarthritic;  
 KW Antirheumatic; Neuroprotective; Antinflammatory; Dermatological;  
 KW Immunosuppressive; Antidiabetic; Antithyroid; Antiasthmatic;  
 KW Antiallergic; Cytostatic; Antipsoriatic; Gene Therapy; Vaccine;  
 KW MHC Class II; Ig-key motif; immune response; antirax; EBOLA; HIV;  
 KW influenza; vaccinia virus; infection; bacterium; virus; parasite; fungus;  
 KW ricketsia; rheumatoid arthritis; multiple sclerosis;  
 KW lupus erythematosus; diabetes mellitus; myasthenia gravis;  
 KW autoimmune thyroiditis; scleroderma; dermatomyositis; pemphigus; asthma;  
 KW allergic rhinitis; topical dermatitis; colitis; cancer; psoriasis;  
 KW adenoma; cat; cat dander; Fel dI.  
 XX Felis catus.  
 DN US2004058881-A1.  
 XX  
 PR 03-NOV-1989; 89US-00431565.  
 PR 28-FEB-1991; 91US-00662276.  
 PR 13-DEC-1991; 91US-00807529.  
 PR 25-MAR-1992; 92US-00857311.  
 PR 15-MAY-1992; 92US-00884718.  
 PR 15-JAN-1993; 93US-0006116.  
 PR 02-SEP-1994; 94US-0030928.  
 XX  
 PA (IMMU-) IMMUNOLOGIC PHARM CORP.  
 XX  
 PT Kuo M, Rogers BL, Gefter ML, Morgenstern JP, Brauer AW;  
 PI Greenstein JL, Griffith IJ, German RD;  
 PI

PA	(ANTI-) ANTIGEN EXPRESS INC.	OS
XX	Humphreys RE, Xu M;	Felis catus.
PT	WPI; 2004-294259/27.	Key
DR		Location/Qualifiers
XX	New non-naturally occurring protein or polypeptide modified by recombinant DNA techniques, useful for treating multiple sclerosis, diabetes mellitus, myasthenia gravis, scleroderma, allergic rhinitis, colitis, cancer or psoriasis.	1..17 /label= Leader_peptide
PT		PT
XX		PT
PS	Example 4; Page 24; 90pp; English.	Protein.
XX		PT
CC	The invention relates to a non-naturally occurring protein or polypeptide directed toward an MHC (major histocompatibility complex) Class II-presented epitope of interest. Suppressing an immune response directed toward an MHC Class II-presented epitope comprises: providing a nucleic acid sequence encoding the MHC Class II-presented epitope of interest, the nucleic acid sequence encoding an Ii-key motif located 4-11 amino acids upstream from the N-terminal residue of the MHC Class II-presented epitope of interest; and modifying the Ii-key motif to decrease its conformation to the archetypal Ii-Key regulatory motif. Enhancing an immune response directed toward an MHC Class II-presented epitope of interest comprises: providing a nucleic acid sequence encoding the MHC Class II-presented epitope of interest, the nucleic acid sequence lacking an Ii-key motif located 4-11 amino acids upstream from the N-terminal residue of the MHC Class II-presented epitope of interest; and modifying the nucleic acid sequence to introduce an Ii-key motif appropriately spaced from the MHC Class II-presented epitope. The protein or polypeptide of interest corresponds to a protein or polypeptide encoded by an infectious pathogen selected from anthrax, EBOLA, HIV or influenza, preferably vaccinia virus. The non-naturally occurring Protein or polypeptide (1) modified by recombinant DNA techniques is useful for treating infectious diseases caused or associated with infection by a bacterium, virus, parasite, fungus, rickettsia or other infectious agents. It is also useful for treating rheumatoid arthritis, multiple sclerosis, lupus erythematosus, diabetes mellitus, myasthenia gravis, autoimmune thyroiditis, scleroderma, dermatomyositis, pemphigus, asthma, allergic rhinitis, topical dermatitis, colitis, cancer, psoriasis or adenomas. The present sequence represents the amino acid sequence of a cat allergen Fel dI chain 1 MHC Class II-presented epitope used in the invention.	Note= "Nature Fel d I chain 2 protein"
XX		PN
CC	directed toward an MHC (major histocompatibility complex) Class II-presented epitope of interest. Suppressing an immune response directed toward an MHC Class II-presented epitope comprises: providing a nucleic acid sequence encoding the MHC Class II-presented epitope of interest, the nucleic acid sequence encoding an Ii-key motif located 4-11 amino acids upstream from the N-terminal residue of the MHC Class II-presented epitope of interest; and modifying the Ii-key motif to decrease its conformation to the archetypal Ii-Key regulatory motif. Enhancing an immune response directed toward an MHC Class II-presented epitope of interest comprises: providing a nucleic acid sequence encoding the MHC Class II-presented epitope of interest, the nucleic acid sequence lacking an Ii-key motif located 4-11 amino acids upstream from the N-terminal residue of the MHC Class II-presented epitope of interest; and modifying the nucleic acid sequence to introduce an Ii-key motif appropriately spaced from the MHC Class II-presented epitope. The protein or polypeptide of interest corresponds to a protein or polypeptide encoded by an infectious pathogen selected from anthrax, EBOLA, HIV or influenza, preferably vaccinia virus. The non-naturally occurring Protein or polypeptide (1) modified by recombinant DNA techniques is useful for treating infectious diseases caused or associated with infection by a bacterium, virus, parasite, fungus, rickettsia or other infectious agents. It is also useful for treating rheumatoid arthritis, multiple sclerosis, lupus erythematosus, diabetes mellitus, myasthenia gravis, autoimmune thyroiditis, scleroderma, dermatomyositis, pemphigus, asthma, allergic rhinitis, topical dermatitis, colitis, cancer, psoriasis or adenomas. The present sequence represents the amino acid sequence of a cat allergen Fel dI chain 1 MHC Class II-presented epitope used in the invention.	US2003177512-A1.
XX		PN
CC	Sequence 100 AA:	PT
SQ	Query Match 100.0%; Score 27; DB 8; Length 100; Best Local Similarity 100.0%; Pred. No. 3.2e-19; Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	AVNER D B;
CC		PT
CC	Disclosure: SEQ ID NO 4; 25pp; English.	AVNER DB;
XX		XX
CC	The present invention relates to a method of producing transgenic cats wherein the gene sequences coding for major cat allergen Fel d I have been disrupted. The invention provides a polynucleotide sequence that encodes a disrupted Fel d I gene. The Fel d I gene has been disrupted by sequence alignment, sequence insertion or deletion of all or part of the Fel d I gene. It has been disrupted with a polynucleotide sequence encoding a selectable marker, which is a gene that confers neomycin resistance. The cat is heterozygous or homozygous for the disrupted Fel d I gene. It does not produce the cat allergen Fel d I. It is sterile and capable of transmitting the disrupted Fel d I gene to its offspring. The Fel d I gene of the somatic cells or germ line cells of the cat is disrupted. The method of the invention comprises introducing a cat stem cell comprising a disrupted Fel d I gene into a cat embryo, transplanting the embryo into a pseudopregnant cat, and allowing the cat embryo to mature into a cat. The method also comprises producing a first and second heterozygous transgenic cat, where the second cat is not the same sex as the first cat, breeding the first and second cats, and selecting transgenic cats that are homozygous for the disrupted Fel d I gene and do not produce Fel d I antigen. The polynucleotide sequence provided by the present invention is useful for preparing a vaccine against allergy. The present sequence is cat Fel d I (chain 2) protein sequence.	WPI; 2003-898650/82. N-PSDB; ADR62495.
XX		XX
CC	Sequence 107 AA:	XX
SQ	Query Match 100.0%; Score 27; DB 7; Length 107; Best Local Similarity 100.0%; Pred. No. 3.4e-19; Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	XX
CC		XX
OY	1 FPAVANGNELLDSLTKNATEPERT 27	XX
Db	31 FPAVANGNELLDSLTKNATEPERT 57	XX
RESULT 13		XX
ID	ADH62496 standard; protein; 107 AA.	XX
AC		XX
ADR62496;		XX
DT	25-MAR-2004 (first entry)	XX
DE	Cat allergen Fel d I (chain 2) protein.	XX
KW	Allergen; vaccine; gene therapy; transgenic animal; Fel d I; embryonic stem cell; allergy; cat.	XX
XX		XX
RESULT 14		XX
ID	ADR12122 standard; protein; 109 AA.	XX
AC		XX
ADR12122;		XX
DT	26-JUL-1991 (first entry)	XX
DE	TRFP I chain 2 - short form.	XX

KW Human T cell reactive feline protein; cat allergens.  
 XX  
 OS Felis catus.  
 XX  
 FH Key Peptide  
 FT Location/Qualifiers  
 PT 3..19  
 /label= Header sequence  
 FT 20..111  
 /label= TRFP I short form  
 XX  
 PN WO9106571-A.  
 XX  
 PD 16-MAY-1991.  
 XX  
 PP 03-NOV-1989; 89US-00431565.  
 XX  
 PR 03-NOV-1989; 89US-00431565.  
 XX  
 PA (IMMU-) IMMUNOLOGIC PHARM COR.  
 XX  
 PI Gefter ML, Garman RD, Greenstein JL, Juo M, Rogers BL, Brauer AW,  
 XX  
 DR WPI; 1991-164135/22.  
 DR N-PSDB; AAQ11839.  
 XX  
 PT New pure covalently linked human T cell reactive feline protein - and  
 PT modified peptide(s), used to reduce effects of cat allergens and to  
 PT diagnose sensitivity to allergens.  
 XX  
 PS Claim 2; FIG 4; 70PP; English.  
 XX  
 CC POLY-A mRNA from cat parotid and mandibular glands was used to produce  
 CC cDNA clones for both chain 1 and chain 2 of TRFP. These clones were then  
 CC used to screen a cat genomic library. Chain 1 exists in two forms having  
 CC different leader sequences (A and B). The sequence can be used to express  
 CC the protein and peptide derive which stimulate Tcells in persons  
 CC allergic to cats. The peptides can be used to reduce/eliminate the  
 CC allergic response partic. by modifn. of lymphokine prodn. by the T-  
 CC cells. They can also be used to identify epitopes responsible for  
 CC sensitivity. The DNA can be used to detect comparable sequence in other  
 CC species, and also for prodn. of modified forms of TRFP esp. showing  
 CC reduced binding to IgE and thus reduced tendency to cause adverse  
 CC reactions. See also ARR12119-R12123  
 SQ Sequence 109 AA;

Query Match 100.0%; Score 27; DB 2; Length 109;  
 Best Local Similarity 100.0%; Pred. No. 3.5e-19;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FFAVANGNELLIDSLTKVATEPERT 27  
 Db 33 FFAVANGNELLIDSLTKVATEPERT 59

RESULT 15

AAR41985  
 ID AAR41985 standard; protein: 109 AA.  
 XX  
 AC AAR41985;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 21-APR-1994 (first entry)  
 DE Human T cell reactive feline protein chain 2.  
 XX  
 KW Human; T cell; reactive; feline; protein; immune response; antigen;  
 KW tolerance; mammal; Dermatophagoides; Felis; Ambrosia; Lolium; Canis;  
 KW Cryptomeria; Alternaria; Alder; Betula; Quercus; Olea; Artemesia;  
 KW Plantago; Parietaria; Blattella; Apis; Periplaneta; autoantigen.  
 XX  
 OS Homo sapiens.

---

FH Key  
 FT Peptide  
 FT 1..17  
 /note= "Signal peptide"  
 FT Protein  
 FT 18..109  
 /note= "Mature protein"  
 XX  
 PN WO9319178-A2.  
 XX  
 PD 30-SEP-1993.  
 XX  
 PR 25-MAR-1993; 93WO-US002462.  
 XX  
 PR 25-MAR-1992; 92US-00857311.  
 PR 15-MAY-1992; 92US-00884718.  
 PR 15-JAN-1993; 93US-00006116.  
 XX  
 PA (IMMU-) IMMUNOLOGIC PHARM CORP.  
 XX  
 PI Gefter ML, Garman RD, Greenstein JL, Kuo M, Briner TJ;  
 PI Morville M;  
 XX  
 DR WPI; 1993-320744/40.  
 DR N-PSDB; AAQ49535.  
 XX  
 PT New peptide(s) for inducing tolerance - comprise one or more epitope(s)  
 PT of an allergen administered subcutaneously, for treating sensitivity to  
 PT cats, bees, etc.  
 XX  
 PS Disclosure; Fig 2; 107PP; English.  
 XX  
 CC This sequence represents chain 2 of human T cell reactive feline protein  
 CC (TRFP). Peptides derived from TRFP may be used in a therapeutic  
 CC composition which is useful in treating disease which involve an immune  
 CC response to a protein antigen. This composition may be used to induce  
 CC tolerance in a mammal to Dermatophagoides, Felis Amorosa, Lolium,  
 CC Cryptomeria, Alternaria, Alder, Betula, Quercus, Olea, Artemesia,  
 CC Plantago, Parietaria, Canis, Blattella, Apis, Periplaneta and to  
 CC autoantigens in humans. (Updated on 25-MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 109 AA;

Query Match 100.0%; Score 27; DB 2; Length 109;  
 Best Local Similarity 100.0%; Pred. No. 3.5e-19;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FFAVANGNELLIDSLTKVATEPERT 27  
 Db 31 FFAVANGNELLIDSLTKVATEPERT 57

Search completed: October 18, 2005, 13:44:17  
 Job time : 167 Secs

GenCore version 5.1.5  
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## OM protein - protein search, using SW model

Run on: October 18, 2005, 13:47:36 ; Search time 170 Seconds

(without alignment(s))  
66.203 Million cell updates/sec

Title: US-09-662-784-6\_COPY\_33\_59

Perfect score: 27 Sequence: 1 FPAVANGNLILDLISLTKVWATEPRT 27

Sequence: 1 Oligo

Scoring table: Gapext 60.0 , Gapext 60.0

Searched: 1860064 BEGS, 416830855 residues

Word size : 0

Maximum DB seq length: 0

Minimum DB seq length: 0

Total number of hits satisfying chosen parameters: 1860064

Post-processing: listing first 45 summaries

Database : Published\_Applications\_AA:\*

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3: /cggn2\_6/podata/2/pupbaa/US06\_NEW\_PUB\_PEP:\*

4: /cggn2\_6/podata/2/pupbaa/US07\_NEW\_PUB\_PEP:\*

5: /cggn2\_6/podata/2/pupbaa/US08\_NEW\_PUB\_PEP:\*

6: /cggn2\_6/podata/2/pupbaa/US08\_PUB\_PEP:\*

7: /cggn2\_6/podata/2/pupbaa/US08\_PUB\_PEP:\*

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9: /cggn2\_6/podata/2/pupbaa/US09A\_PUBCOMB.pep:\*

10: /cggn2\_6/podata/2/pupbaa/US09B\_PUBCOMB.pep:\*

11: /cggn2\_6/podata/2/pupbaa/US09C\_PUBCOMB.pep:\*

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13: /cggn2\_6/podata/2/pupbaa/US10A\_PUBCOMB.pep:\*

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21: /cggn2\_6/podata/2/pupbaa/US16\_NEW\_PUB\_PEP:\*

22: /cggn2\_6/podata/2/pupbaa/US60\_PUBCOMB.pep:\*

## SUMMARIES

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

12	16	59.3	21	8	US-08-464-363-17	Sequence 17, Appl
13	15	59.3	21	15	US-10-463-113-17	Sequence 17, Appl
14	15	55.6	15	8	US-09-464-363-19	Sequence 19, Appl
15	15	55.6	15	15	US-10-463-113-19	Sequence 19, Appl
16	14	51.9	92	16	US-10-809-889-5	Sequence 5, Appl
17	12	44.4	16	15	US-10-445-871-183	Sequence 183, Appl
18	12	44.4	16	15	US-10-553-886-183	Sequence 183, Appl
19	12	44.4	16	16	US-10-609-689-13	Sequence 13, Appl
20	12	44.4	21	15	US-10-245-871-188	Sequence 188, Appl
21	12	44.4	21	15	US-10-553-886-188	Sequence 188, Appl
22	10	37.0	17	16	US-10-809-689-11	Sequence 11, Appl
23	9	33.3	9	15	US-10-445-871-171	Sequence 171, Appl
24	9	33.3	9	15	US-10-253-886-171	Sequence 171, Appl
25	9	33.3	14	15	US-10-245-871-181	Sequence 181, Appl
26	9	33.3	14	15	US-10-424-599-151766	Sequence 181, Appl
27	9	33.3	16	16	US-10-809-689-12	Sequence 12, Appl
28	7	25.9	7	8	US-09-464-363-65	Sequence 65, Appl
29	7	25.9	7	15	US-10-437-663-13298	Sequence 13298, A
30	7	25.9	62	14	US-10-029-386-28338	Sequence 29338, A
31	7	25.9	79	15	US-10-424-599-151766	Sequence 151766,
32	7	25.9	106	15	US-10-437-663-199810	Sequence 199810,
33	7	25.9	110	15	US-10-425-114-61756	Sequence 61756, A
34	7	25.9	132	16	US-10-425-114-66395	Sequence 66395, A
35	7	25.9	151	16	US-10-437-663-13298	Sequence 13298,
36	7	25.9	159	16	US-10-425-115-212287	Sequence 212287,
37	7	25.9	203	16	US-10-467-701-7074	Sequence 37074, A
38	7	25.9	246	16	US-10-425-115-304369	Sequence 30369,
39	7	25.9	254	16	US-10-667-701-33856	Sequence 43056, A
40	7	25.9	317	18	US-10-450-763-32298	Sequence 32298,
41	7	25.9	352	15	US-10-282-122A-59866	Sequence 59866, A
42	7	25.9	385	16	US-10-225-115-304368	Sequence 30368,
43	7	25.9	455	15	US-10-469-993-18374	Sequence 18374, A
44	7	25.9	749	16	US-10-437-963-133292	Sequence 133292,
45	7	25.9	990	16	US-10-437-963-170216	Sequence 170216,

## ALIGNMENTS

RESULT 1  
US-10-295-903-4

; Sequence 4, Application US/10295903

Publication No. US2003017752A1

GENERAL INFORMATION:

APPLICANT: AVNER, David B.

TITLE OF INVENTION: METHOD OF GENETICALLY ALTERING AND

NUMBER OF SEQUENCES: 6

CORRESPONDENCE ADDRESS:

ADDRESSEE: Foley &amp; Lardner

STREET: 3000 K Street, N.W., Suite 500

CITY: Washington

STATE: D.C.

COUNTRY: USA

ZIP: 20007-5109

## COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/295,903

FILING DATE: 18-Jun-2003

CLASSIFICATION: &lt;Unknown&gt;

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 6/0/000,189

FILING DATE: 09-JUN-1995

APPLICATION NUMBER: US 08/657,905

FILING DATE: 07-JUN-1996

APPLICATION NUMBER: US 09/227,873

FILING DATE: 11-JAN-1999

ATTORNEY/AGENT INFORMATION:

NAME: SIMKIN, Michele M.

REGISTRATION NUMBER: 34,717  
 TELECOMMUNICATION DOCKET NUMBER: 40065/105  
 TELEPHONE: (202)672-5399  
 INFORMATION FOR SEQ ID NO: 4:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 107 amino acids  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 SEQUENCE DESCRIPTION: SEQ ID NO: 4:  
 US-10-295-903-4

RESULT 2  
 US-08-464-363-6  
 Sequence 6, Application US/09464363  
 Publication No. US20030035815A1  
 GENERAL INFORMATION:  
 APPLICANT: Rogers, Bruce L.  
 APPLICANT: Morgenstern, Jay  
 APPLICANT: Bond, Julian F.  
 APPLICANT: Garman, Richard D.  
 APPLICANT: Greenstein, Julia L.  
 APPLICANT: Kuo, Mei-chang  
 TITLE OF INVENTION: RECOMBINOPE PEPTIDES  
 NUMBER OF SEQUENCES: 76  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEES: Lahive & Cockfield  
 STREET: 60 State Street, Suite 510  
 CITY: Boston  
 STATE: MA  
 COUNTRY: USA  
 ZIP: 02109  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: ASCII TEXT  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/464,363  
 FILING DATE: 05-JUN-1995  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/1807,529  
 FILING DATE: 13-DEC-1991  
 APPLICATION NUMBER: US 07/662,276  
 FILING DATE: 28-FEB-1991  
 APPLICATION NUMBER: US 07/431,565  
 FILING DATE: 03-NOV-1989  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Amy E. Mandragouras  
 REGISTRATION NUMBER: 36,207  
 REFERENCE/DOCKET NUMBER: IMI-015CN  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (617) 227-7400  
 INFORMATION FOR SEQ ID NO: 6:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 109 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-464-363-6

RESULT 3  
 US-09-847-208-98  
 Sequence 98, Application US/09847208  
 Publication No. US20030082190A1  
 GENERAL INFORMATION:  
 APPLICANT: Saxon, Andrew  
 APPLICANT: Zhang, Ke  
 APPLICANT: Zhu, Daocheng  
 TITLE OF INVENTION: FUSION MOLECULES AND TREATMENT OF IGE-MEDIATED ALLERGIC DISEASES  
 FILE REFERENCE: UCG7,00A  
 CURRENT APPLICATION NUMBER: US/09/847,208  
 CURRENT FILING DATE: 2001-05-01  
 NUMBER OF SEQ ID NOS: 177  
 SOFTWARE: FastSEQ for Windows Version 4.0  
 SEQ ID NO: 98  
 LENGTH: 109  
 TYPE: PRT  
 ORGANISM: Felis silvestris catus (Cat)  
 US-09-847-208-98

RESULT 4  
 US-10-245-871-136  
 Sequence 136, Application US/10245871  
 Publication No. US20030235594A1  
 GENERAL INFORMATION:  
 APPLICANT: HUMPHREYS, ROBERT  
 APPLICANT: XU, MINZHEN  
 TITLE OF INVENTION: TI-KEY/ANTIGENIC BPI TOPE HYBRID PEPTIDE VACCINES  
 FILE REFERENCE: REH-2013  
 CURRENT APPLICATION NUMBER: US 10/245,871  
 CURRENT FILING DATE: 2003-01-09  
 PRIOR APPLICATION NUMBER: 10/197,000  
 PRIOR FILING DATE: 2002-07-17  
 PRIOR APPLICATION NUMBER: 09/396,813  
 PRIOR FILING DATE: 1999-09-14  
 NUMBER OF SEQ ID NOS: 905  
 SOFTWARE: PatentIn Ver. 2.1  
 SEQ ID NO: 136  
 LENGTH: 109  
 TYPE: PRT  
 ORGANISM: Felis domesticus  
 US-10-245-871-136

Query Match 100.0%; Score 27; DB 8; Length 109;  
 Best Local Similarity 100.0%; Pred. No. 6.5e-18; Length 109;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFAVANGNELLIDSLSITKVATEPERT 27  
 Db 31 FFAVANGNELLIDSLSITKVATEPERT 57

RESULT 5  
 US-10-463-113-6

Sequence 6, Application US/10463113  
 Publication No. US20040057959A1  
 GENERAL INFORMATION:  
 APPLICANT: Rogers, Bruce L.  
 Morgenstern, Jay  
 Bond, Julian F.  
 Garman, Richard D.  
 Greenstein, Julia L.  
 Kuo, Mei-chang  
 Morville, Malcolm  
 TITLE OF INVENTION: RECOMBITOPE PEPTIDES  
 NUMBER OF SEQUENCES: 76  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Lahive & Cockfield, LLP  
 STREET: 28 State Street  
 CITY: Boston  
 STATE: MA  
 COUNTRY: USA  
 ZIP: 02109  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: ASCII TEXT  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/10/463,113  
 FILING DATE: 16-Jun-2003  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US 07/807,529  
 FILING DATE: 13-Dec-1991  
 APPLICATION NUMBER: US 07/662,276  
 FILING DATE: 28-Feb-1991  
 APPLICATION NUMBER: US 07/431,565  
 FILING DATE: 03-Nov-1989  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Amy E. Mandragoras  
 REGISTRATION NUMBER: 36,207  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (617) 227-7400  
 TELEFAX: (617) 742-4214  
 INFORMATION FOR SEQ ID NO: 6:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 109 amino acids  
 TYPE: amino acid  
 MOLECULE TYPE: linear  
 TOPOGONY: protein  
 SEQUENCE DESCRIPTION: SEQ ID NO: 6:  
 US-10-463-113-6

RESULT 6  
 Query Match 100.0%; Score 27; DB 15; Length 109;  
 Best Local Similarity 100.0%; Pred. No. 6.5e-18;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1 FFAVANGNELLIDSLKTKNATEPERT 27
Db	31 FFAVANGNELLIDSLKTKNATEPERT 57

RESULT 6  
 Sequence 136, Application US/10253286  
 Publication No. US20040058881A1  
 GENERAL INFORMATION:  
 APPLICANT: HUMPHREYS, ROBERT  
 APPLICANT: XU, MINZHEN  
 TITLE OF INVENTION: 11-KEY/ANTIGENIC EPITOPE HYBRID PEPTIDE VACCINES  
 FILE REFERENCE: REH-2015  
 CURRENT APPLICATION NUMBER: US/10/253, 286  
 CURRENT FILING DATE: 2003-01-13  
 PRIOR APPLICATION NUMBER: 10/197,000  
 PRIOR FILING DATE: 2002-07-17  
 PRIOR APPLICATION NUMBER: 09/396, 813

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PRIOR FILING DATE: 1999-09-14  
 NUMBER OF SEQ ID NOS: 905  
 SOFTWARE: PatentIn Ver. 2.1  
 SEQ ID NO 136  
 LENGTH: 109  
 TYPE: PRT  
 ORGANISM: Felis domesticus  
 US-10-253-286-136

Query Match 100.0%; Score 27; DB 15; Length 109;  
 Best Local Similarity 100.0%; Pred. No. 6.5e-18;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1 FFAVANGNELLIDSLKTKNATEPERT 27
Db	31 FFAVANGNELLIDSLKTKNATEPERT 57

RESULT 7  
 Query Match 100.0%; Score 27; DB 15; Length 109;  
 Best Local Similarity 100.0%; Pred. No. 6.5e-18;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

PRIOR FILING DATE: 1998-01-09  
 PRIORITY APPLICATION NUMBER: GB/9820474.6  
 PRIOR FILING DATE: 1998-09-21  
 NUMBER OF SEQ ID NOS: 124  
 SOFTWARE: PatentIn version 3.0  
 SEQ ID NO 32  
 LENGTH: 109  
 TYPE: PRT  
 ORGANISM: Felis catus  
 US-10-809-689-32

Query Match 100.0%; Score 27; DB 15; Length 109;  
 Best Local Similarity 100.0%; Pred. No. 6.5e-18;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db	31 FFAVANGNELLIDSLKTKNATEPERT 57

RESULT 8  
 Sequence 9, Application US/08464363  
 Publication No. US20030031815A1  
 GENERAL INFORMATION:  
 APPLICANT: Rogers, Bruce L.  
 APPLICANT: Morgenstern, Jay  
 APPLICANT: Bond, Julian F.  
 APPLICANT: Garman, Richard D.  
 APPLICANT: Greenstein, Julia L.  
 APPLICANT: Kuo, Mei-chang  
 APPLICANT: Morville, Malcolm  
 TITLE OF INVENTION: RECOMBITOPE PEPTIDES  
 NUMBER OF SEQUENCES: 76  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Lahive & Cockfield  
 STREET: 60 State Street, Suite 510  
 CITY: Boston  
 STATE: MA  
 COUNTRY: USA  
 ZIP: 02109  
 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: ASCII TEXT  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/464,363  
 FILING DATE: 05-JUN-1995  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US 07/807,529  
 FILING DATE: 13-DEC-1991  
 APPLICATION NUMBER: US 07/662,276  
 FILING DATE: 28-FEB-1991  
 APPLICATION NUMBER: US 07/431,565  
 FILING DATE: 03-NOV-1989  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Amy E. Mandragouras  
 REFERENCE/DOCKET NUMBER: IMI-015CN  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (617) 227-7400  
 TELEFAX: (617) 422-4214  
 INFORMATION FOR SEQ ID NO: 9:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 26 amino acids  
 TYPE: amino acid  
 TOPOLogy: linear  
 MOLECULE TYPE: Peptide  
 FRAGMENT TYPE: Internal  
 SEQUENCE DESCRIPTION: SEQ ID NO: 9:  
 US-10-463-113-9

Query Match 96.3%; Score 26; DB 8; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 1.6e-17;  
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 FFAVANGNELLIDLISLTKVNATEPER 26  
 Db 1 FFAVANGNELLIDLISLTKVNATEPER 26

RESULT 9  
 US-10-463-113-9  
 Sequence 9, Application US/10463113  
 Publication No. US2004005795A1

GENERAL INFORMATION:  
 APPLICANT: Rogers, Bruce L.  
 Morgenstern, Jay  
 Bond, Julian F.  
 Garman, Richard D.  
 Greenstein, Julia L.  
 Kuo, Mei-chang

TITLE OF INVENTION: RECOMBITOPE PEPTIDES  
 NUMBER OF SEQUENCES: 76

CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Lahive & Cockfield, LLP  
 STREET: 28 State Street  
 CITY: Boston  
 STATE: MA  
 COUNTRY: USA  
 ZIP: 02109

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: ASCII TEXT  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/464,363  
 FILING DATE: 05-JUN-1995  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US 07/807,529  
 FILING DATE: 13-DEC-1991  
 APPLICATION NUMBER: US 07/662,276  
 FILING DATE: 28-FEB-1991  
 APPLICATION NUMBER: US 07/431,565  
 FILING DATE: 03-NOV-1989  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Amy E. Mandragouras  
 REFERENCE/DOCKET NUMBER: IMI-015CN  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (617) 227-7400  
 TELEFAX: (617) 422-4214  
 INFORMATION FOR SEQ ID NO: 9:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 96 amino acids  
 TYPE: amino acid

RESULT 10  
 US-08-464-363-39  
 Sequence 39, Application US/08464363  
 Publication No. US2003003581A1

GENERAL INFORMATION:  
 APPLICANT: Rogers, Bruce L.  
 APPLICANT: Morgenstern, Jay  
 APPLICANT: Bond, Julian F.  
 APPLICANT: Garman, Richard D.  
 APPLICANT: Greenstein, Julia L.  
 APPLICANT: Kuo, Mei-chang  
 APPLICANT: Morville, Malcolm  
 TITLE OF INVENTION: RECOMBITOPE PEPTIDES  
 NUMBER OF SEQUENCES: 76

CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Lahive & Cockfield  
 STREET: 60 State Street, Suite 510  
 CITY: Boston  
 STATE: MA  
 COUNTRY: USA  
 ZIP: 02109

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: ASCII TEXT  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/464,363  
 FILING DATE: 05-JUN-1995  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US 07/807,529  
 FILING DATE: 13-DEC-1991  
 APPLICATION NUMBER: US 07/662,276  
 FILING DATE: 28-FEB-1991  
 APPLICATION NUMBER: US 07/431,565  
 FILING DATE: 03-NOV-1989  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Amy E. Mandragouras  
 REFERENCE/DOCKET NUMBER: IMI-015CN  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (617) 227-7400  
 TELEFAX: (617) 422-4214  
 INFORMATION FOR SEQ ID NO: 9:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 96 amino acids  
 TYPE: amino acid

; MOLECULE TYPE: protein

RESULT 11

US-08-464-363-39

Query Match 96.3%; Score 26; DB 8; Length 96;

Best Local Similarity 100.0%; Pred. No. 5.1e-17;

Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFAVANGELLDLSLTKVNATEP 26

Db 44 FFAVANGELLDLSLTKVNATEP 69

---

RESULT 12

US-08-464-363-17

Sequence 17, Application US/08464363

Publication No. US20030035815A1

GENERAL INFORMATION:

APPLICANT: Rogers, Bruce L.

APPLICANT: Morgenstern, Jay

APPLICANT: Bond, Julian F.

APPLICANT: Garman, Richard D.

APPLICANT: Greenstein, Julia L.

APPLICANT: Kuo, Mei-chang

APPLICANT: Morville, Malcolm

TITLE OF INVENTION: RECOMBITOPE PEPTIDES

NUMBER OF SEQUENCES: 76

CORRESPONDENCE ADDRESS:

ADDRESSEE: Laihive & Cockfield LLP

STREET: 28 State Street

CITY: Boston

STATE: MA

COUNTRY: USA

ZIP: 02109

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: ASCII TEXT

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/463,113

FILING DATE: 16-Jun-2003

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/807,529

FILING DATE: 13-DEC-1991

APPLICATION NUMBER: US 07/662,276

FILING DATE: 28-FEB-1991

APPLICATION NUMBER: US 07/431,565

FILING DATE: 03-NOV-1989

ATTORNEY/AGENT INFORMATION:

NAME: Amy E. Mandragoras

REGISTRATION NUMBER: 36,207

TELECOMMUNICATION INFORMATION:

TELEPHONE: (617) 227-4900

TELEFAX: (617) 742-4214

INFORMATION FOR SEQ ID NO: 39:

SEQUENCE CHARACTERISTICS:

LENGTH: 96 amino acids

TYPE: amino acid

TOPOLGY: linear

MOLECULE TYPE: Peptide

FRAGMENT TYPE: Internal

US-08-464-363-17

Query Match 59.3%; Score 16; DB 8; Length 21;

Best Local Similarity 100.0%; Pred. No. 3.9e-08;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFAVANGELLDLSLT 16

Db 6 FFAVANGELLDLSLT 21

---

RESULT 13

US-10-463-113-17

Sequence 17, Application US/10463113

Publication No. US20040057959A1

GENERAL INFORMATION:

APPLICANT: Rogers, Bruce L.

APPLICANT: Morgenstern, Jay

APPLICANT: Bond, Julian F.

APPLICANT: Garman, Richard D.

APPLICANT: Greenstein, Julia L.

APPLICANT: Kuo, Mei-chang

APPLICANT: Morville, Malcolm

Query Match 96.3%; Score 26; DB 15; Length 96;

Best Local Similarity 100.0%; Pred. No. 5.1e-17;

Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFAVANGELLDLSLTKVNATEP 26

Db 44 FFAVANGELLDLSLTKVNATEP 69

TITLE OF INVENTION: RECOMBITOPE PEPTIDES  
 NUMBER OF SEQUENCES: 76  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Lahive & Cockfield, LLP  
 STREET: 28 State Street  
 CITY: Boston  
 STATE: MA  
 COUNTRY: USA  
 ZIP: 02109  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/464,363  
 FILING DATE: 05-JUN-1995  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US/10/463,113  
 FILING DATE: 16-Jun-2003  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US 07/807,529  
 FILING DATE: 13-DEC-1991  
 APPLICATION NUMBER: US 07/662,276  
 FILING DATE: 28-FEB-1991  
 APPLICATION NUMBER: US 07/431,565  
 FILING DATE: 03-NOV-1989  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Amy E. Mandragouras  
 REGISTRATION NUMBER: 36,207  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (617) 227-7400  
 TELEX/FAX: (617) 742-4214  
 INFORMATION FOR SEQ ID NO: 17:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 21 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: peptide  
 FRAGMENT TYPE: internal  
 SEQUENCE DESCRIPTION: SEQ ID NO: 17:  
 US-10-463-113-17

Query Match 59.3%; Score 16; DB 15; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 3.9e-08; Mismatches 0; Indels 0; Gaps 0;  
 Matches 16; Conservative 0; MisMatches 0; Indels 0; Gaps 0;  
 Qy 1 FFAVANGNELLDSL 16  
 Db 6 FFAVANGNELLDSL 21

RESULT 14  
 US-08-464-363-19  
 Sequence 19, Application US/08464363  
 Publication No. US20040057959A1  
 GENERAL INFORMATION:

APPLICANT: Rogers, Bruce L.  
 APPLICANT: Morgenstern, Jay  
 APPLICANT: Bond, Julian F.  
 APPLICANT: Garman, Richard D.  
 APPLICANT: Greenstein, Julia L.  
 APPLICANT: Kuo, Mei-chang  
 APPLICANT: Morville, Malcolm  
 APPLICANT: Morville, Malcolm  
 TITLE OF INVENTION: RECOMBITOPE PEPTIDES  
 NUMBER OF SEQUENCES: 76  
 CORRESPONDENCE ADDRESS:  
 ADDRESS: Lahive & Cockfield, LLP  
 STREET: 28 State Street  
 CITY: Boston  
 STATE: MA  
 COUNTRY: USA  
 ZIP: 02109  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/10/463,113  
 FILING DATE: 16-Jun-2003  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US 07/807,529  
 FILING DATE: 13-DEC-1991  
 APPLICATION NUMBER: US 07/662,276  
 FILING DATE: 28-FEB-1991  
 APPLICATION NUMBER: US 07/431,565  
 FILING DATE: 03-NOV-1989  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Amy E. Mandragouras  
 REGISTRATION NUMBER: 36,207  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (617) 227-7400  
 INFORMATION FOR SEQ ID NO: 19:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 15 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-464-363-19

RESULT 15  
 US-10-463-113-19  
 Sequence 19, Application US/10463113  
 Publication No. US20040057959A1  
 GENERAL INFORMATION:

APPLICANT: Rogers, Bruce L.  
 APPLICANT: Morgenstern, Jay  
 APPLICANT: Bond, Julian F.  
 APPLICANT: Garman, Richard D.  
 APPLICANT: Greenstein, Julia L.  
 APPLICANT: Kuo, Mei-chang  
 APPLICANT: Morville, Malcolm  
 TITLE OF INVENTION: RECOMBITOPE PEPTIDES  
 NUMBER OF SEQUENCES: 76  
 CORRESPONDENCE ADDRESS:  
 ADDRESS: Lahive & Cockfield, LLP  
 STREET: 28 State Street  
 CITY: Boston  
 STATE: MA  
 COUNTRY: USA  
 ZIP: 02109  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/10/463,113  
 FILING DATE: 16-Jun-2003  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US 07/807,529  
 FILING DATE: 13-DEC-1991  
 APPLICATION NUMBER: US 07/662,276  
 FILING DATE: 28-FEB-1991  
 APPLICATION NUMBER: US 07/431,565  
 FILING DATE: 03-NOV-1989  
 ATTORNEY/AGENT INFORMATION:

NAME: Amy E. Mandragourab  
REGISTRATION NUMBER: 36 207  
REFERENCE/DOCKET NUMBER: IMI-015CN  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 227-7400  
TELEFAX: (617) 742-4214  
INFORMATION FOR SEQ ID NO: 19:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 19:  
US-10-463-113-19

Query Match 55.6%; Score 15; DB 15; Length 15;  
Best Local Similarity 100.0%; Pred. No. 2.6e-07;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 12 UDSLTKNATPER 26  
||| ||| ||| ||| |||  
Db 1 UDSLTKNATPER 15

Search completed: October 18, 2005, 14:01:48  
Job time : 179 secs

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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model  
Run on: October 18, 2005, 13:28:53 ; Search time 178 Seconds  
Minimum DB seq length: 0 (without alignments)  
Maximum DB seq length: 2000000000  
Post-processing: Listing first 45 summaries

Title: US-09-662-784-6\_COPY\_33\_59  
Perfect score: 27  
Sequence: 1\_FFAVANGNELLIDSLKVNATEPERT 27

Scoring table: OLIGO

Searched: 1612378 seqs, 512079187 residues  
Word size : 0

Total number of hits satisfying chosen parameters: 1612378  
ID\_FEL2\_FELCA  
AC\_P30440;  
DT\_01-APR-1993 (Rel. 25, Created)  
DT\_01-APR-1993 (Rel. 25, Last sequence update)  
DT\_05-JUL-2004 (Rel. 44, Last annotation update)

DE\_Major allergen I polypeptide chain 2 precursor (Allergen Fel d 1-B)  
DR\_(Fel d 1-B) (Allergen Cat-1) (AG4) (Fdi).  
GN\_Name=CH2;  
OS\_Felis silvestris catus (Cat).  
OC\_Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC\_Mammalia; Buteraria; Carnivora; Fissipedia; Felidae; Felis.  
OX\_NCBI\_TaxID=9685;  
RN\_[1]SEQUENCE FROM N.A., AND SEQUENCE OF 18-100.  
RP\_MEDLINE=92052157; PubMed=946388;  
RA\_Morgenstern J.P., Griffith I.J., Brauer A.W., Rogers B.L., Bond J.F.,  
RA\_Chapman M.D., Kuo M.-C.;  
RT\_"Amino acid sequence of Fel d1, the major allergen of the domestic  
cat: protein sequence analysis and cDNA cloning";  
RT\_Proc. Natl. Acad. Sci. U.S.A. 88:9690-9694(1991).  
RN\_[2]SEQUENCE FROM N.A., ALTERNATIVE SPLICING, AND VARIANTS.  
RC\_TISSUE-Liver.  
RX\_MEDLINE=92241178; PubMed=1572548; DOI=10.1016/0378-1119(92)90405-B;  
RA\_Griffith I.J., Craig S., Pollock J., Yu X.-B., Morgenstern J.P.,  
RA\_Rogers B.L.;  
RT\_"Expression and genomic structure of the genes encoding Fd1, the major  
allergen from the domestic cat.",  
RT\_Gene 113: 263-268 (1992).  
RN\_[3]SEQUENCE OF 18-37, AND CHARACTERIZATION.  
RX\_MEDLINE=9128714; PubMed=1712068; DOI=10.1016/0161-5890(91)90141-6;  
RA\_Duffort A., Carrere J., Nitti G., Polo P., Lombardero M.;  
RT\_Studies on the biochemical structure of the major cat allergen Felis  
domesticus I.;  
Mol. Immunol. 28: 301-309 (1991).  
RN\_[4]CHARACTERIZATION.  
RX\_MEDLINE=8426579; PubMed=6747135;  
RA\_Letterman K., Ohman J.L. Jr.;  
RT\_Cat allergen 1: biochemical, antigenic, and allergenic properties.;  
J. Allergy Clin. Immunol. 74:147-153 (1984).  
CC\_1-SUBUNIT: Heterotetramer composed of two non-covalently linked  
disulfide-linked heterodimer of chains 1 and 2.  
CC\_-1\_ALTERNATIVE PRODUCTS:  
CC\_Event=Alternative splicing; Named isoforms=3;  
Comment=Experimental confirmation may be lacking for some  
isoforms;  
Name=1; Synonyms=CH2L;  
Isold=P30440-1; Sequence=Displayed;  
Name=2; Synonyms=CH2S;  
Isold=P30440-2; Sequence=VSP\_004249;

32	7	25.9	539	2	06FV10	Qsfvi0 candida gla
33	7	25.9	552	2	06FQH2	Qsfqm2 candida gla
34	7	25.9	1595	2	07U694	Q7ug94 rhodopirell
35	7	25.9	1601	2	08IC14	Q8ic14 plasmidium
36	6	22.2	23	2	09H419	Q9h4h9 homo sapien
37	6	22.2	64	2	08HS5D6	Q8hs5d6 oryza sativ
38	6	22.2	86	2	073910	Q7j310 human immun
39	6	22.2	86	2	073911	Q7j311 human immun
40	6	22.2	86	2	073912	Q7j312 human immun
41	6	22.2	87	2	09PDB8	Q9pd8 xyloella fas
42	6	22.2	88	2	06Q214	Q6q214 candidatus
43	6	22.2	91	2	09LR33	Q9lr33 nicotianat
44	6	22.2	96	2	08EUT5	Q8eu75 oceanobacil
45	6	22.2	97	2	09FVU7	Q9fvj7 nicotiana o

Scoring table: Gapop 60.0 , Gapext 60.0

### ALIGNMENTS

Result No.	Score	Query Match Length	DB ID	Description
1	27	100.0	109 1	FEL2_FELCA
2	8	29.6	509 2	Q6R184
3	7	25.9	77 2	Q9KG69
4	7	25.9	100 2	Q8KB4
5	7	25.9	106 2	Q62DG2
6	7	25.9	106 2	Q6PYC6
7	7	25.9	134 2	Q6DMV1
8	7	25.9	198 2	Q9X302
9	7	25.9	1 BACR_HALS4	
10	7	25.9	255 2	Q8FCF6
11	7	25.9	273 2	Q6CP58
12	7	25.9	273 2	P73885
13	7	25.9	303 2	Q64761
14	7	25.9	310 2	Q8KRY1
15	7	25.9	310 2	Q6RZK1
16	7	25.9	310 2	Q74P16
17	7	25.9	315 2	Q8AQW0
18	7	25.9	320 1	AUX_PROLL
19	7	25.9	322 2	QBLTP9
20	7	25.9	322 2	Q8AVV5
21	7	25.9	358 2	Q7MA28
22	7	25.9	420 1	HISZ_SYNP7
23	7	25.9	428 2	Q6CUA1
24	7	25.9	434 2	Q7XQ04
25	7	25.9	455 2	Q8CPH3
26	7	25.9	502 2	Q842D1
27	7	25.9	524 2	Q09012
28	7	25.9	524 2	Q75SW4
29	7	25.9	525 2	Q6VMU4
30	7	25.9	525 2	Q6VMU5
31	2	525	2	Q6VMU6

Name=3; Synonyms=CH2SPT, Truncated;  
 CC ISOID=P304043; Sequence=vSP\_004248;  
 CC - TISSUE SPECIFICITY: The long form is preferentially expressed in  
 CC the salivary gland, while the short form is preferentially  
 CC expressed in the skin.  
 -1 ALERGEN: Causes an allergic reaction in human. Major allergen  
 produced by the domestic cat.

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EMBL; M77341; ARCA1616.1; -. DR  
 EMBL; X62478; CARA4345.1; -. DR  
 PIR; B53283; B53283. DR  
 PIR; C56413; C56413. DR  
 PIR; JC1127; JC1127. DR  
 InterPro; IPR00038; Uteroglobin\_sfuf. KW  
 Allergen; Alternative splicing; Direct protein sequencing; Glycoprotein; Polymorphism; Signal.

CC SIGNAL 1 1.7  
 FT CHAIN 18 1.09 Major allergen I polypeptide chain 2.  
 FT CARBOHD 50 50 N-linked (GlcNAc).  
 FT VARSPLITC 82 109 TPIISKIDCMWSRQVNTDVKLNTLGR -> PSTNIAWVK  
 FT VARSPLITC 82 89 TPIISKID -> IAINEY (in isoform 3).  
 FT VARSPLITC 82 89 /PfDId=vSP\_004248.  
 FT VARIANT 72 72 I -> L (in CH2LV).  
 FT VARIANT 72 72 I -> V (in CH2SV).  
 FT VARIANT 74 75 RV -> KP (in CH2SV).  
 FT VARIANT 91 91 M -> T (in CH2LV).  
 FT VARIANT 96 96 Q -> E (in CH2SV).  
 FT VARIANT 105 105 N -> K (in CH2SV).  
 FT CONFLICT 24 24 C -> F (in Ref. 3).  
 FT CONFLICT 32 32 F -> T (in Ref. 3).  
 SQ SEQUENCE 109 AA; 11854 MW; 857FB9CD7036CB9 CRC64;

Query Match 100.0%; Score 27; DB 1; Length 109;

Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 31 FFAVANGNLIDLSLTKVNATEPERT 57

RESULT 2

06R184 ID O6R184 PRELIMINARY; PRT; 509 AA.  
 AC O6R184; DT 05-JUL-2004 (TREMBlrel. 27, Created)  
 DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)  
 DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)  
 DB FARI1\_protein (Fragment).  
 GN Name=FARI1,  
 OS Zygosaccharomyces rouxii (Candida maggi).  
 OC Baktaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;  
 OC Saccharomycetales; Saccharomycetaceae; Zygosaccharomyces.  
 NCBI\_TaxID=4956;  
 RN [1] SEQUENCE FROM N.A.

RC STRAIN=CBS 732;  
 RA Wolfe K.H.;  
 RL Submitted (DEC-2003) to the EMBL/GenBank/DDBJ databases.  
 DR EMBL; AY496963; AAR88365.1; -.  
 FT NON\_TER 509 509  
 SQ SEQUENCE 509 AA; 58713 MW; BAB6F2FB4B901589 CRC64;

Query Match 29.6%; Score 8; DB 2; Length 509;  
 Best Local Similarity 100.0%; Pred. No. 8.8;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 7 GNLILLDL 14

Db 54 GNLILLDL 61

RESULT 3

Q9KG69 ID Q9KG69 PRELIMINARY; PRT; 77 AA.  
 AC Q9KG69; DT 01-OCT-2000 (TREMBLrel. 15, Created)  
 DT 01-OCT-2000 (TREMBLrel. 15, Last sequence update)  
 DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)  
 DE BH0244 protein.  
 DR OrderedLocusName=BH0244;  
 OS Bacillus halodurans.  
 OC Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.  
 NCBI\_TaxID=86665;  
 RN [1]

SEQUENCE FROM N.A.

STRAIN=C-125;

RX MEDLINE=0512882; PubMed=11058132; DOI=10.1093/nar/28.21.4317;  
 RA Takami H., Nakane K., Takaki Y., Maeno G., Sabaki R., Matsui N.,  
 RA Fuji F., Hirama C., Nakamura Y., Ogasawara N., Kunara S.,  
 RA Horikoshi K.;

"Complete genome sequence of the alkaliophilic bacterium *Bacillus halodurans* and genomic sequence comparison with *Bacillus subtilis*.";  
 RR Nucleic Acids Res. 28:4317-4331(2000).  
 DR EMBL; AP001507; BAB03963.1; -.

PIR; DB3680; DB3680.

SEQUENCE 77 AA; 9511 MW; F9BBC3529F5CE320 CRC64;

Query Match 25.9%; Score 7; DB 2; Length 77;  
 Best Local Similarity 100.0%; Pred. No. 17;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 9 ELLIDS 15

Db 24 ELLIDS 30

RESULT 4

Q8KLBA4 ID Q8KLBA4 PRELIMINARY; PRT; 100 AA.  
 AC Q8KLBA4;  
 DT 01-OCT-2002 (TREMBLrel. 22, Created)  
 DT 01-OCT-2002 (TREMBLrel. 22, Last sequence update)  
 DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)  
 DR Hypothetical protein yh014.  
 GN Name=yh014;  
 OS Rhizobium etli.  
 OC Plasmid symbiotic plasmid p42d.  
 OC Bacteria; Proteobacteria; Alphaproteobacteria; Rhizobiales;  
 OC Rhizobiaceae; Rhizobium/Agrobacterium group; Rhizobium.  
 OX NCBI\_TaxID=29449;  
 RN [1]  
 RP SEQUENCE FROM N.A.

STRAIN=CFM42;

RX MEDLINE=91193195; PubMed=2013564;  
 RA Girard M.L., Flores M., Brom S., Romero D., Palacios R., Davila G.;

RP SEQUENCE FROM N.A.

STRAIN=CFM42;

RX MEDLINE=97419521; PubMed=9274036;  
 RA Ramirez-Romero M.A., Bustos P., Girard L., Rodriguez O.,  
 RA Cevallos M.A., Davila G.;



us-09-662-784-6\_copy\_33\_59.olig.rup

RT	efflux gene <i>mef(A)</i> in <i>Streptococcus pyogenes</i> .";	RA	Kimura Y., Mukohata Y.;
RL	Microb. Drug Resist. 9:243-247(2003).	RT	"Evolution of the archaeal rhodopsins: evolution rate changes by gene duplication and functional differentiation.";
RN	[2]	RT	J. Mol. Biol. 285:163-174(1999).
RP	SEQUENCE FROM N.A.	CC	-I- FUNCTION: Light-driven proton pump.
RC	SRASTRAIN-2812A; Santatti M., Iannelli F., Cascone C., Stefani S., Pozzi G.;	CC	-I- SUBCELLULAR LOCATION: Integral membrane protein.
RA	DR Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.	CC	-- SIMILARITY: Belongs to the archaeal/bacterial/fungal opsin family.
RL	DR EMBL, AY51002; AAC72374.1; -.	CC	This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation.
DR	KW Hypothetical protein.	CC	the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <a href="http://www.isb-sib.ch/announce/">http://www.isb-sib.ch/announce/</a> or send an email to license@isb-sib.ch).
SQ	SEQUENCE 134 AA; 15373 MW; 897916A18372A242 CRC64;	CC	---
Query Match	25.9%; Score 7; DB 2; Length 134;	DR	EMBL; AB009620; BAM75200.1; -.
Best Local Similarity	100.0%; Pred. No. 29;	DR	HSSP; P0245; IBRD.
Matches	7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	DR	InterPro; IPR001425; Bac rhodopsin.
Oy	11         17	DR	PFAM; PF01036; Bac rhodopsin_1.
Db	25         31	DR	PROSITE; PS00251; BACTERIAL_OPSIN_1.
RESULT 8		DR	PROSITE; PS0027; BACTERIAL_OPSIN_RET; 1.
O9X302	PRELIMINARY; PRT; 198 AA.	DR	Hydrogen ion transport; Ion transport; Photoreceptor; Retinal protein;
ID	O9X302; 01-NOV-1999 (TREMBLrel. 12, Created)	KW	Transmembrane.
AC	01-NOV-1999 (TREMBLrel. 12, Last sequence update)	FT	DOMAIN 1 18 Extracellular (By similarity).
DT	01-JUN-2003 (TREMBLrel. 24, Last annotation update)	FT	TRANSMEM 19 37 Helix A (By similarity).
DR	PXO1-31	FT	DOMAIN 38 51 Cytoplasmic (By similarity).
OS	Bacillus anthracis.	FT	TRANSMEM 52 70 Helix B (By similarity).
OC	plasmid virulence plasmid PXO1.	FT	TRANSMEM 71 86 Extracellular (By similarity).
OC	Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.	FT	TRANSMEM 87 104 Helix C (By similarity).
OC	Okinaka R.T., Cloud K., Hampton R., Hoffmaster A.R., Hill K.K.,	FT	TRANSMEM 105 115 Cytoplasmic (By similarity).
NCBI_TAXID=1392;	Keim P., Lankie G., Kumano S., Mahillon J., Mantei D.,	FT	TRANSMEM 116 135 Helix D (By similarity).
RN	Martinez Y., Riche D., Svenson R., Jackson P.J.,	FT	TRANSMEM 136 142 Extracellular (By similarity).
RP	"Sequence and organization of pXO1, the large <i>Bacillus anthracis</i>	FT	TRANSMEM 143 162 Helix E (By similarity).
RC	plasmid harboring the anthrax toxin genes.";	FT	TRANSMEM 163 180 Cytoplasmic (By similarity).
RX	J. Bacteriol. 181:6509-6515(1999).	FT	TRANSMEM 181 199 Helix F (By similarity).
RA	DR EMBL; AP063404; ADD3235.1; -.	FT	TRANSMEM 200 212 Extracellular (By similarity).
RA	PIR; G59094; G59094.	FT	TRANSMEM 213 232 Helix G (By similarity).
RN	plasmid.	FT	TRANSMEM 233 250 Cytoplasmic (By similarity).
RT	DR G59094; G59094.	FT	SITE 93 93 Primary proton acceptor (By similarity).
RT	Sequence FROM N.A.	FT	BINDING 225 225 Retinal chromophore (By similarity).
RL	Query Match 25.9%; Score 7; DB 2; Length 198;	SQ	SEQUENCE 250 AA; 27041 MW; B7D3373506FD275 CRC64;
DR	Best Local Similarity 100.0%; Pred. No. 41;	DR	Query Match 25.9%; Score 7; DB 1; Length 250;
KW	Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	DR	Best Local Similarity 100.0%; Pred. No. 50;
SQ	Oy 8         14	DR	Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Db	150         156	DR	Oy 10         16
RESULT 9		DR	Db 101         107
BCR_HALS4	STANDARD; PRT; 250 AA.	RESULT 10	
ID	BCR_HALS4	O6FCV6	PRELIMINARY; PRT; 255 AA.
AC	O93740; 16-OCT-2001 (Rel. 40, Created)	ID	O6FCV6
DT	16-OCT-2001 (Rel. 40, Last sequence update)	AC	O6FCV6;
DT	05-JUN-2004 (TREMBLrel. 27, Last annotation update)	DT	05-JUL-2004 (TREMBLrel. 27, Last sequence update)
DR	O5-JUN-2004 (TREMBLrel. 27, Last annotation update)	DR	Survival protein (acid phosphatase) (EC 3.1.3.2).
DR	05-JUN-2004 (TREMBLrel. 27, Last annotation update)	DR	Name=serB; Order=locusName=ACTAD1227;
DR	05-JUN-2004 (TREMBLrel. 27, Last annotation update)	OS	Acinetobacter sp. (strain ADP1).
DR	Bacteriorhodopsin (BR).	OC	Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
GN	Name=bp;	OC	Moraxellaceae; Acinetobacter.
OS	Halobacterium sp. (strain arg-4).	OX	NCBI_TaxID=62977;
OC	Archaea; Euryarchaeota; Halobacteria; Halobacteriales;	RN	SEQUENCE FROM N.A.
OC	Halobacteriaceae; Halobacterium.	RA	Barbe V., Vallenet D., Foncknechten N., Kreimeyer A., Oztas S.,
NCBI_TAXID=160432;	[1]	RA	Labeyrie L., Crueviller S., Robert C., Duprat S., Wincker P.,
RN	SEQUENCE FROM N.A.	RA	Ornston L.N., Weissenbach J., Marliere P., Cohen G.N., Medigue C.;
RP	MEDLINE=99096913; PubMed=9878996; DOI=10.1006/jmbi.1998.2285;	RT	"Unique features revealed by the genome sequence of <i>Acinetobacter</i> sp. ADP1, a versatile and naturally transformation competent bacterium".
RX	Inaba K., Uemura T., Katagiri I., Kitajima-Inaba T., Sugiyama Y.,		

RL	Nucleic Acids Res. 0:0-0(2004).
DR	EMBL; CR433861; CAG68103-1; -;
DR	GO; GO:0003933; F-acid phosphatase activity; IEA.
DR	Interpro; IPR02828; Sure.
DR	Pfam; PF01975; SurE; 1.
DR	TIGRFAMS; TIGR00087; surE; 1.
KW	Complete proteome.
SQ	SEQUENCE 255 AA; 27574 MW; C4EB04235BP82A46 CRC64;
Query Match	Best Local Similarity 100.0%; Pred. No. 51; Length 255; Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	1 FFAVANG 7
Db	224 FFAVANG 230
RESULT 11	
ID	QCP5B PRELIMINARY; PRT; 273 AA.
AC	06CP5B;
DT	25-OCT-2004 (TREMBLrel. 28, Created)
DT	25-OCT-2004 (TREMBLrel. 28, last sequence update)
DT	25-OCT-2004 (TREMBLrel. 28, last annotation update)
DE	Similar to sp P26754 Saccharomyces cerevisiae YNL312w RFA2 DNA
DE	replication factor A.
GN	ORFNames=KLIA0073489;
OS	Kluyveromyces lactis NRRL Y-1140.
OC	Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
OC	Saccharomycetidae; Saccharomyctaceae; Kluyveromyces.
OX	NCBI_TaxID:284590;
RN	[1]
RP	SEQUENCE FROM N.A.
RC	STRAIN=NRL Y-1140;
RG	Genolouvres;
RA	Dujon B., Sherman D., Fischer G., Durrens P., Casaregola S., Lafontaine I., de Montigny J., Marcot C., Neuveglise C., Talla E., Goffard N., Frangoul L., Aigle M., Anthouard V., Babour A., Barbe V., Barnay S., Blanchin S., Beckerich J.M., Beyne E., Blykaaten C., Boisrame A., Boyer J., Cattolico L., Confinioleri F., de Darvvar A., Despont L., Fabre E., Faucheu H., Ferry-Dumazet H., Groppi A., Hantraye F., Hennequin C., Jauniaux N., Joyet P., Kachouri R., Kraatz A., Koszul R., Lemire M., Lesur I., Ma L., Muller H., Nicastri J.M., Nikolski M., Oztas S., Ozier-Kalogeropoulos O., Pellenz S., Potier S., Richard G.F., Straub M.L., Suleau A., Svannenre D., Tekata F., Wasolowski-Louvel M., Westhof E., Wirth B., Zeniou-Meyer M., Zivkovic I., Bolotin-Fukuhara M., Therry A., Bouchier C., Caudron B., Scarpelli C., Gaillardin C., Weissenbach J., Wincker P., Souciet J.L.; "Genome evolution in yeasts."; Nature 430:35-44(2004).
RN	[2]
RP	SEQUENCE FROM N.A.
RC	STRAIN=NRL Y-1140;
RA	Genoscope;
RA	Submitted (JUL-2004) to the EMBL/GenBank/DBJ databases.
DR	EMBL; CR392125; CAG99568.1; -;
DR	GO; GO:0003676; F-nucleic acid binding; IEA..
DR	Interpro; IPR008934; Nucleic acid_OB.
DR	Interpro; IPR04365; tRNA_anti.
DR	Pfam; PF01336; tRNA_antI_1.
SQ	SEQUENCE 273 AA; 30347 MW; 4121F346314942BD CRC64;
Query Match	Best Local Similarity 100.0%; Pred. No. 54; Length 273; Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	2 FAVANG 8
Db	174 FAVANG 180
RESULT 12	
ID	P73885 PRELIMINARY; PRT; 279 AA.
AC	P73885;
DT	01-FEB-1997 (TREMBLrel. 02, Created)
DT	01-FEB-1997 (TREMBLrel. 02, Last sequence update)
DT	01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE	SIR267 protein.
GN	OrderedLocusName=SIR0267;
OS	Synechocystis sp. (strain PCC 6803); Bacteria; Cyanobacteria; Chroococcales; Synechocystis.
OC	NCBI_TaxID:1148;
RN	[1]
RP	SEQUENCE FROM N.A.
RC	STRAIN=PCC6803;
RX	MEDLINE=97061201; PubMed=8905231;
RA	Kaneko T., Sato S., Kotani H., Tanaka A., Asamizu E., Nakamura S., Miyajima N., Hirosewa M., Sugiyama M., Sasamoto S., Kimura T., Hobouchi T., Matsuno A., Muraki A., Nakao N., Naruo K., Okumura S., Shimpo S., Takeuchi C., Wada T., Watanabe A., Yamada M., Tabata S.; "Sequence analysis of the genome of the unicellular cyanobacterium Synechocystis sp. strain PCC6803. II. Sequence determination of the entire genome and assignment of potential protein-coding regions.,"; DNA Res. 3:105-116 (1996).
DR	EMBL; D91910; BAA17949.1; -.
DR	PIR; S75087; S75087.
DR	HSSP; 031743; IPU.
DR	GO; GO:0005525; R-GTP binding; IEA.
DR	Interpro; IPR005289; GTP-binding.
DR	Interpro; IPR006073; GTP1_OBG.
DR	Interpro; IPR02917; MMR_HSR1.
DR	Pfam; PF01926; MMR_HSR1; 1.
DR	PRINTS; PR00326; GTP1OBG.
DR	TIGRFAMS; TIGR00650; MG412; 1.
KW	Complete proteome.
SQ	SEQUENCER 279 AA; 31201 MW; 93A603118D77763 CRC64;
Query Match	Best Local Similarity 100.0%; Pred. No. 55; Length 279; Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	10 LLDSL 16
Db	213 LLDSL 219
RESULT 13	
ID	064761 PRELIMINARY; PRT; 303 AA.
AC	064761;
DT	01-AUG-1998 (TREMBLrel. 07, Created)
DT	01-AUG-1998 (TREMBLrel. 07, Last sequence update)
DT	01-MAR-2004 (TREMBLrel. 26, Last annotation update)
DE	Potentative phosphatidylinositol-glycan synthase.
GN	Name=at2934980;
OS	Arabidopsis thaliana (Mouse-ear cress).
OC	Eukaryota; Viridiplantae; Streptophytina; Tracheophyta; Spermatophytina; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosidae II; Brassicales; Brassicaceae; Arabidopsis.
OC	europa II; Brassicales; Brassicaceae; Arabidopsis.
RN	[1]
RP	SEQUENCE FROM N.A.
RA	Rounsley S.D., Lin X., Ketchum K.A., Crosby M.L., Brandon R.C., Somerville C.R., Venter J.C.; Submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.
RL	[2]
RN	SEQUENCE FROM N.A.
RA	Town C.D., Kaul S.; Submitted (FEB-2002) to the EMBL/GenBank/DBJ databases.
RL	EMBL; AC004238; AAC12837.1; -.

DR PIR; T00479; T00479;  
 DR GO; GO:0016021; C: integral to membrane; IBA.  
 DR GO; GO:0017176; F: phosphatidylinositol-N-acetylglucosaminyltr. . ; IBA.  
 DR InterPro; IPR0050506; P:GPI anchor biosynthesis; IBA.  
 DR Pfam; PF06432; GPI2; 1.  
 SQ SEQUENCE 303 AA; 34200 MW; 88E6BF82F4940C92 CRC64;  
 Query Match 25.9%; Score 7; DB 2; Length 303;  
 Best Local Similarity 100.0%; Pred. No. 60;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 10 LLDDSL 16  
 Db 89 LLDDSL 95  
 |||||  


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**RESULT 14**  
 Q8KYR1 PRELIMINARY; PRT; 310 AA.  
 AC Q8KYR1;  
 DT 01-OCT-2002 (TREMBLrel. 22, Created)  
 DT 01-JUN-2003 (TREMBLrel. 24, Last sequence update)  
 DB Hypothetical protein BXA0045.  
 GN Name=BXA0045;  
 OS Bacillus anthracis str. A2012.  
 OC Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.  
 OX NCBI\_TaxID=191218;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC STRAIN=A2012;  
 RX MEDLINE=22061436; PubMed=12004073; DOI=10.1126/science.1071837;  
 RA Read T.D., Salzberg S.L., Pop M., Shumway M., Umayam L., Jiang L.,  
 RA Holtzapple E., Busch J.D., Smith K.L., Schupp J.M., Solomon D.,  
 RA Keim P., Fraser C.M.;  
 RT "Comparative Genome Sequencing for Discovery of Novel Polymorphisms in  
 RT *Bacillus anthracis*," Sequencing for Discovery of Novel Polymorphisms in  
 RL Science 296:12028-2033 (2002).  
 DR EMBL; AE001190; AACM2001.1; --.  
 KW Hypothetical protein; Plasmid.  
 SQ SEQUENCE 310 AA; 36423 MW; 716F21DB64CFE274 CRC64;  
 Query Match 25.9%; Score 7; DB 2; Length 310;  
 Best Local Similarity 100.0%; Pred. No. 61;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 8 NEILLDL 14  
 Db 262 NEILLDL 268  
 |||||  


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**RESULT 15**  
 Q6EZXL PRELIMINARY; PRT; 310 AA.  
 ID Q6EZXL;  
 AC Q6EZXL;  
 DT 25-OCT-2004 (TREMBLrel. 28, Created)  
 DT 25-OCT-2004 (TREMBLrel. 28, Last sequence update)  
 DB Hypothetical protein.  
 DE OrderedLocusNames=GBAA\_PX01\_0045;  
 OS Bacillus anthracis.  
 OC Plasmid\_PX01.  
 OC Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.  
 OX NCBI\_TaxID=1392;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC STRAIN=Ames / isolate 0581;  
 RA Ravel J., Rasko D.A., Shumway M.F., Jiang L., Cer R.Z., Federova N.B.,  
 RA Wilson M., Stanley S., Decker S., Read T.D., Salzberg S.L.,  
 RA Fraser C.M.;  
 RT "Bacillus anthracis comparative genomics,"

RL Submitted (MAY-2004) to the EMBL/GenBank/DBBJ databases.  
 DR EMBL; AE017335; AAC78786.2; --.  
 DR TIGR; GBAA\_PX01\_0045; --.  
 KW Complete proteome.  
 SQ SEQUENCE 310 AA; 36423 MW; 716F21DB64CFE274 CRC64;  
 Query Match 25.9%; Score 7; DB 2; Length 310;  
 Best Local Similarity 100.0%; Pred. No. 61;  
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 8 NEILLDL 14  
 Db 262 NEILLDL 268  
 |||||  


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 Search completed: October 18, 2005, 13:47:25  
 Job time : 182 secs

GenCore version 5.1.6  
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## OM protein - protein search, using sw model

Run on:

October 18, 2005, 13:37:20 ; Search time 39 Seconds  
(without alignment)

66.612 Million cell updates/sec

Title: score: US-09-662-784-6\_COPY\_33\_59

Perfect score: 27 FFAVANGNELLIDSLTKUNATEPERT 27

Sequence: 1 FFAVANGNELLIDSLTKUNATEPERT 27

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 283416 seqs, 9216763 residues

Word size : 0

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Listing first 45 summaries

Database : PIR\_79;\*

1: pir1;\*

2: pir2;\*

3: pir3;\*

4: pir4;\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	27	100.0	JC1127	major allergen chain 2 precursor, short form - cat
2	27	100.0	C56413	major allergen chain 2 precursor, short form - cat
3	25.9	109	D3680	Felis silvestris catus (domestic cat)
4	7	25.9	G59094	hypothetical prote
5	7	25.9	T50677	hypothetical prote
6	7	25.9	S75087	bacteriorhodopsin
7	7	25.9	T00479	probable phosphatase
8	7	25.9	B86722	probable phosphatase
9	7	25.9	S44982	biotin carboxylate
10	6	25.9	B82878	flagellin - Shigell
11	6	22.2	E9093	hypothetical prote
12	6	22.2	KIRPA	Ig kappa chain C r
13	6	22.2	D72598	hypothetical prote
14	6	22.2	T03060	hypothetical prote
15	6	22.2	H90453	hypothetical prote
16	6	22.2	A3894	chorismate mutase
17	6	22.2	AC2066	hypothetical prote
18	6	22.2	F9703	transcription regu
19	6	22.2	I45013	interleukin-2 prec
20	6	22.2	155	interleukin-2 prec
21	6	22.2	T23995	hypothetical prote
22	6	22.2	161	hypothetical prote
23	6	22.2	H72082	conserved hypothet
24	6	22.2	H72039	dihydrofolate redu
25	6	22.2	E8659	dihydrofolate redu
26	6	22.2	174	conserved hypothet
27	6	22.2	B97974	degenerate transpo
28	6	22.2	C72411	Holliday Junction
29	6	22.2	H87416	phosphoglycerate m

**RESULT 1**  
JC1127  
major allergen chain 2 precursor, short form - cat  
C;Species: Felis silvestris catus (domestic cat)  
C;Date: 31-Dec-1993 #sequence\_revision 31-Dec-1993 #text\_change 09-Jul-2004  
C;Accession: JC1127  
R;Griffith, I.J.; Craig, S.; Pollock, J.; Yu, X.B.; Morgenstern, J.P.; Rogers, B.L.  
Gene 113, 263-268, 1992  
A;Title: Expression and genomic structure of the genes encoding FdI, the major allergen  
A;Reference number: JC1126; MUID:9224178; PMID:1572548  
A;Accession: JC1127  
A;Molecule type: DNA  
A;Cross-references: UNIPROT:P30440; GB:X62478; NID:9395406; PID:CAA44345.1; PID:9395407|  
A;Experimental source: skin  
C;Genetics:  
A;Gene: Ch2  
A;Introns: 21/1; 81/3  
C;Keywords: glycoprotein  
F;1-17/domain: signal sequence #status predicted <SIG>  
F;18-107/product: major allergen chain 2, short form #status predicted <MAT>  
F;50/Binding site: carbohydrate (Asn) (covalent) #status predicted  
Query Match 100%; Score 27; DB 2; Length 107;  
Best Local Similarity 100.0%; Pred. No. 1.4e-20; Mismatches 0; Indels 0; Gaps 0;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 FFAVANGNELLIDSLTKUNATEPERT 27  
Db 31 FFAVANGNELLIDSLTKUNATEPERT 57

**RESULT 2**  
C56413  
major allergen Fel d1 chain 2 precursor - cat  
C;Species: Felis silvestris catus (domestic cat)  
C;Date: 11-Aug-1995 #sequence\_revision 11-Aug-1995 #text\_change 09-Jul-2004  
C;Accession: C56413; JCL145  
R;Morgenstern, J.P.; Griffith, I.J.; Brauer, A.W.; Rogers, B.L.; Bond, J.F.; Chapman, M  
Proc. Natl. Acad. Sci. U.S.A., 88, 960-964, 1991  
A;Title: Amino acid sequence of Fel d1, the major allergen of the domestic cat: protein  
A;Reference number: A56413; MUID:92052157; PMID:1946388  
A;Accession: C56413  
A;Status: preliminary  
A;Molecule type: mRNA  
A;Residue: 1-109 <MOR>  
A;Cross-references: UNIPROT:P30440; GB:W7341; NID:9163822; PID:9163823  
R;Griffith, I.J.; Craig, S.; Pollock, J.; Yu, X.B.; Morgenstern, J.P.; Rogers, B.L.  
Gene 113, 263-268, 1992  
A;Title: Expression and genomic structure of the genes encoding FdI, the major allergen  
A;Reference number: JC1126; MUID:92241678; PMID:1572548  
A;Accession: JC1145

A;Status: nucleic acid sequence not shown  
A;Molecule type: mRNA  
A;Residue: 18-109 <GRI>  
A;Experimental source: salivary gland  
C;Keywords: glycoprotein  
F;1-1;/Domain:  
P;50/Binding site: carbohydrate (Asn) (covalent) #status predicted  
Query Match 100.0%; Score 27; DB 2; Length 109;  
Best Local Similarity 100.0%; Pred. No. 1.4e-20;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 FFAVAVANGELLIDLSLKVNATEPERT 27  
Db 31 FFAVAVANGELLIDLSLKVNATEPERT 57

**RESULT 3**  
D83680  
hypothetical protein BH0244 [imported] - *Bacillus halodurans* (strain C-125)  
C;Species: *Bacillus halodurans*  
C;Date: 01-Dec-2000 #sequence\_revision 01-Dec-2000 #text\_change 09-Jul-2004  
C;Accession: D83680  
R;Takami, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Nasui, N.; Fuji, F.; Hirai, Nucleic Acids Res. 28, 4317-4331, 2000  
A;Title: Complete genome sequence of the alkaliphilic bacterium *Bacillus halodurans* and its physiological properties  
A;Reference number: A83650; MUID:20512582; PMID:11058132  
A;Accession: D83680  
A;Status: preliminary  
A;Molecule type: DNA  
A;Residues: 1-277 <STO>  
A;Cross-references: UNIPROT:Q9KG69; GB:AP001507; GB:BA000004; NID:910172612; PIDN:BA039  
A;Experimental source: strain C-125  
C;Genetics:  
A;Gene: BH0244

**RESULT 4**  
G59094  
hypothetical protein px01-31 - *Bacillus anthracis* virulence plasmid px01  
C;Species: *Bacillus anthracis*  
C;Date: 12-Nov-1999 #sequence\_revision 12-Nov-1999 #text\_change 09-Jul-2004  
C;Accession: G59094  
R;Okinaka, R.I.; Cloud, K.; Hampton, O.; Hofmaster, A.R.; Hill, K.K.; Keim, P.; Koehler, J.; Bacteriol. 181, 6509-6515, 1999  
A;Title: Sequence and organization of px01, the large *Bacillus anthracis* plasmid harboring reference number: A59091; MUID:9445483; PMID:10515943  
A;Accession: G59094  
A;Status: preliminary  
A;Molecule type: DNA  
A;Residues: 1-198 <OKI>  
A;Cross-references: UNIPROT:Q9X302; GB:AF065104; NID:94894216; PIDN:AAD32335.1; PID:9489  
A;Experimental source: strain Sterne  
C;Genetics:  
A;Gene: px01-31  
C;Genome: plasmid  
C;Superfamily: *Bacillus anthracis* virulence plasmid px01 hypothetical protein px01-31  
Query Match 25.9%; Score 7; DB 2; Length 198;  
Best Local Similarity 100.0%; Pred. No. 7.3%;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

**RESULT 5**  
T50677  
bacteriorhodopsin [similarity] - "Haloterrigena" sp. (strain arg-4)  
C;Species: "Haloterrigena" sp.  
A;Variety: strain arg-4  
C;Date: 21-Jul-2000 #sequence\_revision 21-Jul-2000 #text\_change 03-Nov-2000  
C;Accession: T50677  
R;Ihara, K.; Umemura, T.; Katajima-Ihara, T.; Sugiyama, Y.; Kimura, Y.; Mu J. Mol. Biol. 285, 163-174, 1999  
A;Title: Evolution of the archaeal rhodopsins: Evolution rate changes by gene duplication  
A;Reference number: Z22703; MUID:99096913; PMID:9878396  
A;Accession: T50677  
A;Status: preliminary; translated from GB/EMBL/DDBJ  
A;Molecule type: DNA  
A;Residues: 1-250 <THA>  
A;Cross-references: EMBL:AB009620; PIDN:BAA75200.1  
C;Genetics:  
A;Gene: bop  
C;Superfamily: bacteriorhodopsin  
C;Keywords: chromoprotein; photoreceptor; retinal; transmembrane protein  
P;225/Binding site: retinal(Lys) (covalent) #status predicted  
Query Match 25.9%; Score 7; DB 2; Length 250;  
Best Local Similarity 100.0%; Pred. No. 9.1%;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 10 LILDL 16  
Db 101 LILDL 107

**RESULT 6**  
S75087  
hypothetical protein slr0267 - *Synechocystis* sp. (strain PCC 6803)  
C;Species: *Synechocystis* sp.  
C;Accession: S75087  
C;Date: 25-Apr-1997 #sequence\_revision 25-Apr-1997 #text\_change 09-Jul-2004  
C;Accession: S75087  
R;Kaneko, T.; Sato, S.; Kotani, H.; Tanaka, A.; Asamizu, E.; Nakamura, Y.; Miyajima, N.; O, K.; Okumura, S.; Shimojo, S.; Takeuchi, C.; Wada, T.; Watanabe, A.; Yamada, M.; Yasuda, DNA Res. 3, 109-136, 1996  
A;Title: Sequence analysis of the genome of the unicellular cyanobacterium *Synechocystis* sp.  
B;Reference number: S74322; MUID:97061201; PMID:8905231  
A;Accession: S75087  
A;Status: preliminary  
A;Molecule type: DNA  
A;Residues: 1-279 <RN>  
A;Cross-references: UNIPROT:P73885; EMBL:D90910; GB:AB001339; NID:91652956; PIDN:BAA1794  
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, June 1996  
C;Superfamily: conserved hypothetical protein MG442  
Query Match 25.9%; Score 7; DB 2; Length 279;  
Best Local Similarity 100.0%; Pred. No. 10.1%;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 10 LILDL 16  
Db 213 LILDL 219

**RESULT 7**  
T00479  
probable phosphatidylinositol-glycan synthase [imported] - *Arabidopsis thaliana*  
C;Alternative names: hypothetical protein F19J3.21  
C;Species: *Arabidopsis thaliana* (mouse-ear cress)  
C;Date: 12-Feb-1999 #sequence\_revision 12-Feb-1999 #text\_change 09-Jul-2004  
C;Accession: T00479; B8463  
R;Rounseley, S.D.; Lin, K.; Ketchum, K.A.; Crosby, M.L.; Brandon, R.C.; Sykes, S.M.; Kaul, S.; submitted to the EMBL Data Library, April 1998  
A;Description: *Arabidopsis thaliana* chromosome II BAC F19J3 genomic sequence.

QY 8 NEILDL 14  
Db 150 NEILDL 156

A;Reference number: Z14160  
A;Accession: T00479  
A;Status: translated from GB/EMBL/DDBJ  
A;Molecule type: DNA  
A;Residues: 1-303 <ROU>  
A;Cross-references: UNIPROT:064761; EMBL:AC004238; NID:9303373; PIDN:9303393  
A;Experimental source: cultivar Columbia  
R;Lin, X.; Kaul, S.; Rounsey, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y.;  
M.; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; VanRken, S.E.; Umayam, L.; Taiton, L.;  
euss, D.; Nieman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venet, J.  
Nature 402, 761-768, 1999  
A;Title: Sequence and analysis of chromosome 2 of the plant *Arabidopsis thaliana*.  
A;Reference number: A64420; MUID:20083487; PMID:10617197  
A;Accession: B841763  
A;Status: preliminary  
A;Molecule type: DNA  
A;Residues: 1-303 <STO>  
A;Cross-references: GB:AE002093; NID:9303393; PIDN:AC12837.1; GSPDB:GN00139  
C;Species: C;Genetic: C;Gene: At2g34980; F1913.21  
A;Map position: 2

Query Match 25.9%; score 7; DB 2; Length 303;  
Best Local Similarity 100.0%; Pred. No. 11; 0; Mismatches 0; Indels 0; Gaps 0;  
Matches 7; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 10 LUDISL 16  
Db 89 LUDISL 95

RESULT 8

B86722 biotin carboxylase (EC 6.3.4.14) [imported] - *Lactococcus lactis* subsp. *lactis* (strain 1  
C;Species: *Lactococcus lactis* subsp. *lactis* (strain 1  
C;Date: 23-Mar-2001 #sequence\_revision 23-Mar-2001 #text\_change 09-Jul-2004  
C;Accession: B86722  
R;Bolotin, A.; Wincker, P.; Mauger, S.; Jaillon, O.; Malarme, K.; Weissenbach, J.; Ehrl  
Genome Res. 11, 731-753, 2001  
A;Title: The complete genome sequence of the lactic acid bacterium *Lactococcus lactis* se  
A;Reference number: A86625; MUID:21235186; PMID:11337471  
A;Accession: B86722  
A;Status: preliminary  
A;Molecule type: DNA  
A;Residues: 1-55 <STO>  
A;Cross-references: UNIPROT:Q9CHF3; GB:AE005176; PIDN:91273697; PIDN:AAK04876.1; GSPDB:  
A;Experimental source: strain IL1403  
C;Genetics: C;Gene: accC  
C;Superfamily: biotin carboxylase; biotin carboxylase homology  
C;Keywords: ligase

Query Match 25.9%; score 7; DB 2; Length 455;  
Best Local Similarity 100.0%; Pred. No. 16; 0; Mismatches 0; Indels 0; Gaps 0;  
Matches 7; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 4 VANGNEL 10  
Db 316 VANGNEL 322

RESULT 9

44982 flagellin - *Shigella sonnei*  
C;Species: *Shigella sonnei*  
C;Accession: S44982; S44981  
C;Date: 06-Jan-1995 #sequence\_revision 06-Jan-1995 #text\_change 09-Jul-2004  
C;Accession: S44982; S44981  
R;Tominga, A.; Mahmoud, M.A.H.; Mukaihara, T.; Enomoto, M.  
Mol. Microbiol. 12, 277-285, 1994  
A;Title: Molecular characterization of intact, but cryptic, flagellin genes in the genus  
A;Reference number: S44980; MUID:94335647; PMID:8057852  
A;Accession: S44982  
A;Status: preliminary

Query Match 25.9%; score 7; DB 2; Length 87;  
Best Local Similarity 100.0%; Pred. No. 36; 0; Mismatches 0; Indels 0; Gaps 0;  
Matches 6; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 8 NEILLD 13  
Db 2 NEILLD 7

RESULT 10

B86778 hypothetical protein XP1461 [imported] - *Xylella fastidiosa* (strain 9a5c)  
C;Species: *Xylella fastidiosa*  
C;Date: 18-Aug-2000 #sequence\_revision 20-Aug-2000 #text\_change 09-Jul-2004  
C;Accession: B86778  
R;anonymous, The *Xylella fastidiosa* Consortium of the Organization for Nucleotide Sequen  
Nature 406, 151-157, 2000  
A;Title: The genome sequence of the plant pathogen *Xylella fastidiosa*.  
A;Reference number: A82515; MUID:2036717; PMID:1091047  
A;Accession: B82678  
A;Status: preliminary  
A;Molecule type: DNA  
A;Residues: 1-87 <SIM>  
A;Cross-references: UNIPROT:QDPPBB; GB:AE003976; PIDN:AB003849; NID:99106479; PIDN:AAFB8427(  
A;Experimental source: strain 9a5c  
R;Simpson, A.J.G.; Reinach, P.C.; Arruda, P.; Abreu, F.A.; Aceñco, M.; Alvarezaga, R.; A  
Briones, M.R.S.; Bruno, M.R.P.; Camargo, A.A.; Camargo, L.B.A.; Carrasco, D.M.; Carter, H  
as-Neto, E.; Docena, C.; El-Dorry, H.; Pacincani, A.P.; Ferreira, A.J.S.  
submitted to GenBank, June 2000  
A;Authors: Ferreira, V.C.A.; Ferro, J.A.; Fraga, J.S.; Franca, S.C.; Franco, M.C.; Frohm  
J.D.; Junqueira, M.L.; Kemper, E.L.; Kitajima, J.R.; Krieger, J.B.; Kuramane, E.E.; Laigr  
chado, M.A.; Madeira, A.M.B.N.; Madeira, H.M.F.; Marino, C.L.; Marques, M.V.; Martins, E  
A;Authors: Martins, E.M.F.; Matsukuma, A.Y.; Menck, C.F.M.; Miracco, E.C.; Mirak, C.Y.,  
F.G.; Nunes, I.R.; Oliveira, M.A.; de Oliveira, M.C.; de Oliveira, R.C.; Palmer, D.A.;  
Rodrigues, V.; Rosa, A.J. de M.; de Rosa Jr., V.E.; de Sa, R.G.; Santelli, R.V.; Sawasaki  
A;Authors: da Silva, A.C.R.; da Silva, F.R.; da Silva, A.M.; Verjovski-Almeida, S.; Vettore, A.L.; Z  
M.; Tsunako, M.H.; Vallada, H.; Van Sluys, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; Z  
A;Reference number: A59328  
A;Comments: annotation  
C;Genetics:  
A;Gene: XP1461

Query Match 22.2%; score 6; DB 2; Length 87;  
Best Local Similarity 100.0%; Pred. No. 36; 0; Mismatches 0; Indels 0; Gaps 0;  
Matches 6; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 8 NEILLD 13  
Db 2 NEILLD 7

RESULT 11

E90033 hypothetical protein orf100 [imported] - *Guillardia theta* nucleomorph  
C;Species: nucleomorph *Guillardia theta*  
C;Note: a nucleomorph is the vestigial nucleus of a eukaryotic endosymbiont  
C;Date: 10-May-2001 #sequence\_revision 10-May-2001 #text\_change 09-Jul-2004  
C;Accession: E90033  
R;Douglas, S.; Zauner, S.; Fraunholz, M.; Beaton, M.; Penny, S.; Deng, L.T.; Wu, X.; Rei  
Nature 410, 1091-1096, 2001  
A;Title: The highly reduced genome of an enslaved algal nucleus.  
A;Reference number: A99082; MUID:11323671; PMID:11323671  
A;Accession: E90093  
A;Status: preliminary  
A;Molecule type: DNA  
A;Residues: 1-100  
A;Cross-references: UNIPROT:Q98RS0; GB:AF165818; NID:913794502; PIDN:AAK39877.1; GSPDB:G



GenCore version 5.1.6  
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## OM protein - protein search, using sw model

Run on: October 18, 2005, 13:38:43 ; Search time 42 Second(s)

Sequence: 1 FFAVANGNBLIDLTKRNATEPRT 27  
47.989 Million cell updates/sec

Title: US-09-662-784-6\_COPY\_33\_59  
Perfect score: 27

Scoring table: OLIGO

Scored: Gapop 60.0 , Gapext 60.0

Searched: 513545 seqs, 74649064 residues

Word size : 0

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 200000000

## Post-processing: Listing first 45 summaries

Issued Patents AA:  
 1: /cgn2\_6/ptodata/1/1/aa/5A/COMB.pep: \*  
 2: /cgn2\_6/ptodata/1/1/aa/5B/COMB.pep: \*  
 3: /cgn2\_6/ptodata/1/1/aa/6A/COMB.pep: \*  
 4: /cgn2\_6/ptodata/1/1/aa/6B/COMB.pep: \*  
 5: /cgn2\_6/ptodata/1/1/aa/PCTUS/COMB.pep: \*  
 6: /cgn2\_6/ptodata/1/1/aa/backfilest.pep: \*

\*Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

28	26	96.3	26	3	US-08-430-014-19
29	25	96.3	26	3	US-08-431-134-19
30	26	96.3	26	5	PCT-US93-02462-9
31	26	96.3	1	1	US-07-807-529A-39
32	26	96.3	26	3	US-08-430-944D-103
33	26	96.3	3	3	US-08-431-184-103
34	19	70.4	82	3	US-08-300-948C-15
35	19	70.4	82	3	US-08-430-944D-16
36	19	70.4	82	3	US-08-430-04-16
37	19	70.4	82	3	US-08-431-184-16
38	19	70.4	83	1	US-07-662-193-7
39	19	70.4	83	1	US-07-662-193-8
40	18	66.7	18	3	US-08-300-928C-25
41	18	66.7	18	3	US-08-430-944D-25
42	18	66.7	18	3	US-08-430-01-25
43	18	66.7	18	3	US-08-300-928C-25
44	18	66.7	27	3	US-08-300-928C-57
45	18	66.7	27	3	US-08-430-944D-57

## ALIGNMENTS

RESULT 1 US-08-300-928C-14					
<i>Sequence 14, Application US/08300928C</i>					
PATENT NO:	6019972	GENERAL INFORMATION:			
APPLICANT:	GEFTER, Malcolm L. et al.	TITLE OF INVENTION:	PEPTIDES FOR HUMAN T CELL REACTIVE FELINE PROTEIN (TRFP)		
NUMBER OF SEQUENCES:	101	TITLE OF INVENTION:	PROTEIN (TRFP)		
CORRESPONDENCE ADDRESS:	IMMUNOLOGIC PHARMACEUTICAL CORPORATION	ADDRESS:	610 LINCOLN STREET		
STREET:		CITY:	WALTHAM		
STATE:	Massachusetts	COUNTRY:	USA		
ZIP:	02445	COMPUTER READABLE FORM:			
MEDIUM TYPE:	Floppy disk	COMPUTER:	IBM PC compatible		
OPERATING SYSTEM:	PC-DOS/MS-DOS	SOFTWARE:	ASCII text		
CURRENT APPLICATION DATA:		APPLICATION NUMBER:	US/08/300,928C		
APPLICATION NUMBER:	US/08/300,928C	FILED DATE:	September 2, 1994		
CLASSIFICATION:	435	CLASSIFICATION:	435		
PRIOR APPLICATION DATA:		APPLICATION NUMBER:	07/807,529		
		FILED DATE:	December 13, 1991		
		CLASSIFICATION:	435		
ATTORNEY/AGENT INFORMATION:		NAME:	AMY E. MANDRAGURAS		
		REGISTRATION NUMBER:	36,207		
		REFERENCE/DOCKET NUMBER:	002,605 (IMI-044)		
TELECOMMUNICATION INFORMATION:		TELEPHONE:	(617) 227-7400		
TELEFAX:	(617) 227-5941	INFORMATION FOR SEQ ID NO: 14:			
SEQUENCE CHARACTERISTICS:		SEQUENCE LENGTH:	90 amino acids		
TYPE:	amino acid	TOPOLOGY:	linear		
MOLECULE TYPE:	peptide	FRAGMENT TYPE:	internal		
SEQUENCE:	US-08-300-928C-14	SEQUENCE:	US-08-300-928C-14		
SEQUENCE:	US-08-430-944D-8	SEQUENCE:	US-08-430-944D-8		
SEQUENCE:	US-08-430-014-8	SEQUENCE:	US-08-430-014-8		
SEQUENCE:	US-08-431-184-8	SEQUENCE:	US-08-431-184-8		
SEQUENCE:	US-08-431-184-8	SEQUENCE:	US-08-431-184-8		
SEQUENCE:	PCT-US93-02462-5	SEQUENCE:	PCT-US93-02462-5		
SEQUENCE:	US-07-662-193-4	SEQUENCE:	US-07-662-193-4		
SEQUENCE:	US-08-300-928C-8	SEQUENCE:	US-08-300-928C-8		
SEQUENCE:	US-08-430-944D-10	SEQUENCE:	US-08-430-944D-10		
SEQUENCE:	US-08-430-014-10	SEQUENCE:	US-08-430-014-10		
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SEQUENCE:	US-08-430-944D-10	SEQUENCE:	US-08-430-944D-10		
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SEQUENCE:	US-07-662-193-5	SEQUENCE:	US-07-662-193-5		
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SEQUENCE:	US-07-662-193-4	SEQUENCE:	US-07-662-193-4		
SEQUENCE:	US-08-300-928C-6	SEQUENCE:	US-08-300-928C-6		
SEQUENCE:	US-08-430-944D-6	SEQUENCE:	US-08-430-944D-6		
SEQUENCE:	US-08-430-014-6	SEQUENCE:	US-08-430-014-6		
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SEQUENCE:	US-08-300-928C-19	SEQUENCE:	US-08-300-928C-19		
SEQUENCE:	US-08-430-944D-19	SEQUENCE:	US-08-430-944D-19		

Query Match	100.0%	Score 27;	DB 3;	Length 90;	
Best Local Similarity	100.0%	Pred. No.	2.5e-19;		
Matches	27;	Conservative	0;	Mismatches	0;
		Indels	0;	Gaps	0;
OY	1	FFAVANGNBLIDLTKRNATEPRT 27			

Db 14 FFAVANGNELLIDSLTKVATEPERT 40

RESULT 2 US-08-430-944D-14

Sequence 14, Application US/08430944D

PATENT NO. 6,025162

GENERAL INFORMATION:

APPLICANT: Bruce L. Rogers et al.

TITLE OF INVENTION: A HUMAN T CELL REACTIVE FELINE PROTEIN

TITLE OF INVENTION:

NUMBER OF SEQUENCES: 103

CORRESPONDENCE ADDRESS:

ADDRESSEE: LAHIVE & COCKFIELD, LLP

STREET: 28 State Street

CITY: Boston

STATE: Massachusetts

COUNTRY: USA

ZIP: 02109

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: ASCII text

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/430,014

FILING DATE:

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

NAME: Amy E. Mandragoras

REGISTRATION NUMBER: 36,207

REFERENCE/DOCKET NUMBER: 002.GUS (IMI-044)

TELECOMMUNICATION INFORMATION:

TELEPHONE: (617) 227-7400

TELEFAX: (617) 227-5941

INFORMATION FOR SEQ ID NO: 14:

SEQUENCE CHARACTERISTICS:

SEQUENCE FOR SEQ ID NO: 14:

LENGTH: 90 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

FRAGMENT TYPE: internal

US-08-430-014-14

INFORMATION FOR SEQ ID NO: 14:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/300,928

FILING DATE: 28-APR-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/430,014

FILING DATE: 27-APR-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/430,944

FILING DATE: 02-SEPT-1994

ATTORNEY/AGENT INFORMATION:

NAME: Amy E. Mandragoras

REGISTRATION NUMBER: 36,207

REFERENCE/DOCKET NUMBER: IMI-044DV2

TELECOMMUNICATION INFORMATION:

TELEPHONE: (617) 227-7400

TELEFAX: (617) 742-4214

Query Match 100.0%; Score 27; DB 3; Length 90;

Best Local Similarity 100.0%; Pred. No. 2.5e-19;

Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 FFAVANGNELLIDSLTKVATEPERT 27

Db 14 FFAVANGNELLIDSLTKVATEPERT 40

RESULT 4 US-08-431-184-14

Sequence 14, Application US/08431184

PATENT NO. 6,120769

GENERAL INFORMATION:

APPLICANT: Bruce L. Rogers et al.

TITLE OF INVENTION: A HUMAN T CELL REACTIVE FELINE PROTEIN

TITLE OF INVENTION:

NUMBER OF SEQUENCES: 103

CORRESPONDENCE ADDRESS:

ADDRESSEE: LAHIVE & COCKFIELD, LLP

STREET: 28 State Street

CITY: Boston

STATE: Massachusetts

COUNTRY: USA

ZIP: 02109

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/431,184

FILING DATE: 28-APR-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/430,014

FILING DATE: 27-APR-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/300,928

FILING DATE: 02-SEPT-1994

ATTORNEY/AGENT INFORMATION:

NAME: Amy E. Mandragoras

REGISTRATION NUMBER: 36,207

RESULT 3 US-08-430-014-14

Sequence 14, Application US/08430014

PATENT NO. 6,08962

GENERAL INFORMATION:

APPLICANT: Malcolm L. et al.

TITLE OF INVENTION: PEPTIDES FOR HUMAN T CELL REACTIVE FELINE

TITLE OF INVENTION:

NUMBER OF SEQUENCES: 101

CORRESPONDENCE ADDRESS:

ADDRESSEE: IMMULOGIC PHARMACEUTICAL CORPORATION

STREET: 610 LINCOLN STREET

CITY: WALTHAM

STATE: Massachusetts

REFERENCE/DOCKET NUMBER: IMI-044DV3  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (617)227-7400  
 TELEX/FAX: (617)742-4214  
 INFORMATION FOR SEQ ID NO: 14:

SEQUENCE CHARACTERISTICS:  
 LENGTH: 90 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: peptide  
 FRAGMENT TYPE: internal

US-08-431-184-14

Query Match

Best Local Similarity 100.0%; Score 27; DB 3; Length 90;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 FFAVANGNELLIDSLTSKVNATEPERT 27  
 Db 14 FFAVANGNELLIDSLTSKVNATEPERT 40

RESULT 5

US-08-100-928C-13  
 Sequence 13, Application US/08300928C  
 Patent No. 6019972

GENERAL INFORMATION:  
 APPLICANT: GIFFTER, Malcolm L. et al.  
 TITLE OF INVENTION: PEPTIDES FOR HUMAN T CELL REACTIVE FELINE PROTEIN (TRFP)

TITLE OF INVENTION: PROTEIN (TRFP)  
 NUMBER OF SEQUENCES: 101  
 NUMBER OF BASES: 101  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: IMMULOGIC PHARMACEUTICAL CORPORATION

ADDRESS: 610 LINCOLN STREET  
 CITY: WALTHAM  
 STATE: Massachusetts  
 COUNTRY: USA  
 ZIP: 02445

COMPUTER READABLE FORM:  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patient In Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US 08/430, 944D  
 FILING DATE: 28-APR-1995

PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/300, 928  
 FILING DATE: 02-SEPT-1994

PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/430, 014  
 FILING DATE: 27-APR-1995  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 35, 207  
 REGISTRATION NUMBER: IMI-044DV2  
 REFERENCE/DOCKET NUMBER: IMI-044DV2

TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (617)227-7400  
 TELEX/FAX: (617)742-4214  
 INFORMATION FOR SEQ ID NO: 13:

SEQUENCE CHARACTERISTICS:  
 LENGTH: 92 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: peptide  
 FRAGMENT TYPE: internal

US-08-430-944D-13

Query Match

Best Local Similarity 100.0%; Score 27; DB 3; Length 92;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 FFAVANGNELLIDSLTSKVNATEPERT 27  
 Db 14 FFAVANGNELLIDSLTSKVNATEPERT 40

RESULT 7

US-08-430-014-13  
 Sequence 13, Application US/08430014  
 Patent No. 6043962

GENERAL INFORMATION:  
 APPLICANT: GIFFTER, Malcolm L. et al.  
 TITLE OF INVENTION: PEPTIDES FOR HUMAN T CELL REACTIVE FELINE PROTEIN (TRFP)

TITLE OF INVENTION: PROTEIN (TRFP)  
 NUMBER OF SEQUENCES: 101  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: IMMULOGIC PHARMACEUTICAL CORPORATION

ADDRESS: 610 LINCOLN STREET  
 CITY: WALTHAM  
 STATE: Massachusetts  
 COUNTRY: USA

Db 14 FFAVANGNELLIDSLTSKVNATEPERT 40

RESULT 6

US-08-430-944D-13

Sequence 13, Application US/08430944D

GENERAL INFORMATION:  
 APPLICANT: Bruce L. Rogers et al.  
 TITLE OF INVENTION: A HUMAN T CELL REACTIVE FELINE PROTEIN  
 TITLE OF INVENTION:  
 NUMBER OF SEQUENCES: 103  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: DAHIVE & COCKFIELD, LLP  
 STREET: 28 State Street  
 CITY: Boston  
 STATE: Massachusetts  
 COUNTRY: USA  
 ZIP: 02109

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patient In Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US 08/430, 944D  
 FILING DATE: 28-APR-1995  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/430, 014  
 FILING DATE: 27-APR-1995  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 35, 207  
 REGISTRATION NUMBER: IMI-044DV2  
 REFERENCE/DOCKET NUMBER: IMI-044DV2

TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (617)227-7400  
 TELEX/FAX: (617)742-4214  
 INFORMATION FOR SEQ ID NO: 13:

SEQUENCE CHARACTERISTICS:  
 LENGTH: 92 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: peptide  
 FRAGMENT TYPE: internal

US-08-430-944D-13

Query Match

Best Local Similarity 100.0%; Score 27; DB 3; Length 92;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 FFAVANGNELLIDSLTSKVNATEPERT 27  
 Db 14 FFAVANGNELLIDSLTSKVNATEPERT 40

RESULT 7

US-08-430-014-13  
 Sequence 13, Application US/08430014  
 Patent No. 6043962

GENERAL INFORMATION:  
 APPLICANT: GIFFTER, Malcolm L. et al.  
 TITLE OF INVENTION: PEPTIDES FOR HUMAN T CELL REACTIVE FELINE PROTEIN (TRFP)

TITLE OF INVENTION: PROTEIN (TRFP)  
 NUMBER OF SEQUENCES: 101  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: IMMULOGIC PHARMACEUTICAL CORPORATION

ADDRESS: 610 LINCOLN STREET  
 CITY: WALTHAM  
 STATE: Massachusetts  
 COUNTRY: USA

ZIP: 02145  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: ASCII text  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/430,014  
 FILING DATE: 27-APR-1995  
 CLASSIFICATION:  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: 08/300,928  
 FILING DATE:  
 ATTORNEY/AGENT INFORMATION:  
 NAME: AMY E. MANDRAGOURAS  
 REGISTRATION NUMBER: 36,207  
 REFERENCE/DOCKET NUMBER: 002.6US (IMI-044)  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (617) 227-7400  
 TELEFAX: (617) 742-4214  
 INFORMATION FOR SEQ ID NO: 13:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 92 amino acids  
 TYPE: amino acid  
 TOPOLogy: linear  
 MOLECULE TYPE: peptide  
 FRAGMENT TYPE: internal  
 US-08-431-184-13

Query Match 100.0%; Score 27; DB 3; Length 92;  
 Best Local Similarity 100.0%; Pred. No. 2.6e-19;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Ov 1 FFAVANGNELLIDSLSTKVNATEPERT 27  
 Db 14 FFAVANGNELLIDSLSTKVNATEPERT 40

RESULT 8  
 US-08-431-184-13  
 Sequence 13, Application US/08431184  
 Patent No. 6120569  
 GENERAL INFORMATION:  
 APPLICANT: Bruce L. Rogers et al.  
 TITLE OF INVENTION: A HUMAN T CELL REACTIVE FELINE PROTEIN  
 TITLE OF INVENTION:  
 NUMBER OF SEQUENCES: 103  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: LATIVE & COCKFIELD, LLP  
 STREET: 28 State Street  
 CITY: Boston  
 STATE: Massachusetts  
 COUNTRY: USA  
 ZIP: 02109  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: ASCII text  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/300,928C  
 FILING DATE: September 2, 1994  
 CLASSIFICATION: 435  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: 07/807,529  
 FILING DATE: December 13, 1991  
 CLASSIFICATION: 435  
 ATTORNEY/AGENT INFORMATION:  
 NAME: AMY E. MANDRAGOURAS  
 REGISTRATION NUMBER: 36,207  
 REFERENCE/DOCKET NUMBER: 002.6US (IMI-044)  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (617) 227-7400  
 TELEFAX: (617) 227-5941  
 INFORMATION FOR SEQ ID NO: 10:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 97 amino acids  
 TYPE: amino acid  
 TOPOLogy: linear  
 MOLECULE TYPE: protein  
 US-08-300-928C-10

Query Match 100.0%; Score 27; DB 3; Length 97;  
 Best Local Similarity 100.0%; Pred. No. 2.7e-19;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Ov 1 FFAVANGNELLIDSLSTKVNATEPERT 27  
 Db 33 FFAVANGNELLIDSLSTKVNATEPERT 59

RESULT 10  
US-08-430-944D-10  
Sequence 10, Application US/08430944D  
; Patent No. 6025162

GENERAL INFORMATION:  
APPLICANT: Bruce L. Rogers et al.  
TITLE OF INVENTION: A HUMAN T CELL REACTIVE FELINE PROTEIN  
NUMBER OF SEQUENCES: 103  
CORRESPONDENCE ADDRESS:  
ADDRESSE: LAHIVE & COCKFIELD, LLP  
STREET: 28 State Street  
CITY: Boston  
STATE: Massachusetts  
COUNTRY: USA  
ZIP: 02109

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: ASCII text

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/430,014  
FILING DATE:  
CLASSIFICATION:  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: 08/300,928  
FILING DATE:  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Amy E. Mandragoras  
REGISTRATION NUMBER: 36,207  
SEQUENCE CHARACTERISTICS:  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 227-4000  
TELEFAX: (617) 227-5941

INFORMATION FOR SEQ ID NO: 10:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 97 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULAR TYPE: protein

US-08-430-014-10  
Query Match 100.0%; Score 27; DB 3; Length 97;  
Best Local Similarity 100.0%; Pred. No. 2.7e-19;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

INFORMATION FOR SEQ ID NO: 10:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 97 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein

REGISTRATION NUMBER: IMI-044DV2  
REFERENCE/DOCKET NUMBER: IMI-044DV2

TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 227-7400  
TELEFAX: (617) 742-4214

PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 08/300,928  
FILING DATE: 27-APR-1995

ATTORNEY/AGENT INFORMATION:  
NAME: Amy E. Mandragoras  
REGISTRATION NUMBER: 36,207

US-08-430-944D-10  
Query Match 100.0%; Score 27; DB 3; Length 97;  
Best Local Similarity 100.0%; Pred. No. 2.7e-19;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

INFORMATION FOR SEQ ID NO: 10:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 97 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein

RESULT 11  
US-08-430-014-10  
Sequence 10, Application US/08430014  
; Patent No. 604962

GENERAL INFORMATION:  
APPLICANT: Malcolm L. et al.  
TITLE OF INVENTION: PEPTIDES FOR HUMAN T CELL REACTIVE FELINE PROTEIN  
NUMBER OF SEQUENCES: 101  
CORRESPONDENCE ADDRESS:  
ADDRESSE: IMMULOGIC PHARMACEUTICAL CORPORATION  
STREET: 610 LINCOLN STREET  
CITY: WALTHAM  
STATE: Massachusetts  
COUNTRY: USA  
ZIP: 02445

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent-in Release #1.0, version #1.25

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/431,184  
FILING DATE: 28-APR-1995

PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 08/300,928  
FILING DATE: 02-SEPT-1994

ATTORNEY/AGENT INFORMATION:  
NAME: Amy E. Mandragoras  
REGISTRATION NUMBER: 36,207  
REFERENCE/DOCKET NUMBER: IMI-044DV3  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 227-7400  
TELEFAX: (617) 742-4214

INFORMATION FOR SEQ ID NO: 10:

SEQUENCE CHARACTERISTICS:  
 LENGTH: 97 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-431-184-10

Query Match 100.0%; Score 27; DB 3; Length 97;  
 Best Local Similarity 100.0%; Pred. No. 2.7e-19; Indels 0; Gaps 0;  
 Matches 27; Conservative 0; Mismatches 0;

Qy 1 FFAVANGNELLIDSLSLTKVATEPERT 27  
 Db 33 FFAVANGNELLIDSLSLTKVATEPERT 59

RESULT 13  
 US-07-662-193-5

Sequence 5, Application US/07662193  
 GENERAL INFORMATION:  
 PATENT NO. 52891  
 APPLICANT: Kuo, Mei-chang  
 ADDRESS: LARIVE & COCKFIELD  
 STREET: 60 State Street, Suite 510  
 CITY: Boston  
 STATE: MA  
 COUNTRY: USA  
 ZIP: 02109

COMPUTER READABLE FORM:  
 COMPUTER: IBM PC compatible  
 COMPUTER SYSTEM: PC-DOS/MS-DOS  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: ASCII TEXT

CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/07/807, 529A  
 FILING DATE: 03-NOV-1989  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Channing, Stacey L.  
 REGISTRATION NUMBER: 31, 035  
 REFERENCE/DOCKET NUMBER: IPC-027/imi-015

TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (617) 494-0060  
 INFORMATION FOR SEQ ID NO: 6:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 109 amino acids  
 TYPE: AMINO ACID  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-07-807-529A-6

RESULT 15  
 US-08-300-928C-8  
 Sequence 8, Application US/08300928C  
 PATENT NO. 6019972  
 GENERAL INFORMATION:  
 APPLICANT: GEFTER, Malcolm L. et al.  
 TITLE OF INVENTION: PEPTIDES FOR HUMAN T CELL REACTIVE FELINE  
 TITLE OF INVENTION: PROTEIN (TRFP)  
 NUMBER OF SEQUENCES: 101  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEER: IMMUNOLOGIC PHARMACEUTICAL CORPORATION  
 STREET: 610 LINCOLN STREET  
 CITY: WALTHAM  
 STATE: Massachusetts  
 COUNTRY: USA  
 ZIP: 02445

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk

Query Match 100.0%; Score 27; DB 1; Length 109;  
 Best Local Similarity 100.0%; Pred. No. 3e-19; Indels 0; Gaps 0;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FFAVANGNELLIDSLSLTKVATEPERT 27  
 Db 33 FFAVANGNELLIDSLSLTKVATEPERT 59

RESULT 14  
 US-07-807-529A-6  
 Sequence 6, Application US/07807529A

COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: ASCII text  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/300,928C  
FILING DATE: September 2, 1994  
CLASSIFICATION: 435  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: 07/807,529  
FILING DATE: December 13, 1991  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: AMY E. MANDRAGOURAS  
REGISTRATION NUMBER: 36,207  
REFERENCE/DOCKET NUMBER: 002.6US (IMI-044)  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 227-7400  
TELEFAX: (617) 227-5941  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 109 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-300-928C-8

Query Match 100.0%; Score 27; DB 3; length 109;  
Best Local Similarity 100.0%; Pred. No. 3e-19;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 FFAVANGNELLIDLSLKVNATEPERT 27  
Db 33 FFAVANGNELLIDLSLKVNATEPERT 59

Search completed: October 18, 2005, 13:48:56  
Job time : 43 Secs

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